





# Discretes - Diodes - Leaded

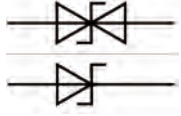
Type	$V_{RRM}$	$I_{FAV}$ @ $T_A$	$T_A$	$I_{FSM}$ @ $T_A=25^\circ C$	$V_F$ @ $I_F$ $T_j=25^\circ C$	$I_F-V_F$	$I_R$ @ $T_j=25^\circ C$	$R_{th(j-a)}$	$T_j$	Case	Circuit
	V	A	°C	A	V	A	mA	K/W	°C		
<b>Standard recovery</b>											
SK 1	1000-1600	1.45	60	60	1.50	10	0.4	85	-40 ... +150	E33	
SKN 2,5	400-1600	2.5	45	180	1.20	10	1.5	55	-40 ... +180	E5	
SK 3	1000-1600	3.3	85	180	1.20	10	0.6	60	-40 ... +150	E34	
SKN 5	200-1600	5	45	190	1.25	15	2.2	25	-40 ... +180	E6	
P 600 A ... P 600 S	50-1200	6	50	400	1.00	5	0.025	3.5	-50 ... +175	8 x 7,5	
P 800 ATL ... P 800 STL	50-1200	8	50	400	1.00	5	0.025	1.8	-50 ... +175	8 x 7,5	
P 1000 A ... P 1000 S	50-1200	10	50	400	0.90	5	0.025	5	-50 ... +175	8 x 7,5	
P 1200 A ... P 1200 S	50-1200	12	50	600	0.84-0.88	5	0.025	2.5	-50 ... +175	8 x 7,5	
P 1500 ATL ... P 1500 STL	50-1200	15	50	600	0.84-0.88	5	0.025	1.8	-50 ... +175	8 x 7,5	
P 2000 A ... P 2000 M	50-1000	20	50	650	0.85-0.87	5	0.01	1	-50 ... +175	8 x 7,5	
P 2500 A ... P 2500 M	50-1000	25	50	650	0.85-0.87	5	0.005	1	-50 ... +175	8 x 7,5	
P 2500 ATL ... P 2500 STL	50-1200	25	50	650	0.84-0.87	5	0.025	1	-50 ... +175	8 x 7,5	

Type	$V_{RRM}$	$t_{rr}$	$I_{FAV}$ @ $T_A$	$T_A$	$I_{FSM}$ @ $T_A=25^\circ C$	$V_F$ @ $I_F$ $T_j=25^\circ C$	$I_F-V_F$	$I_R$ @ $T_j=25^\circ C$	$R_{th(j-a)}$	$T_j$	Case	Circuit
	V	ns	A	°C	A	V	A	mA	K/W	°C		
<b>Fast recovery</b>												
MR 820 ... MR 828	50-800	300	5	50	300	1.20	5	0.025	20	-50 ... +150	8 x 7,5	
HE 6SF200	200	200	6	45	300	0.95	6	0.005	20	-50 ... +175	8 x 7,5	
F 1200A ... F 1200G	50-400	200	12	50	650	0.82	5	0.025	2.5	-50 ... +175	8 x 7,5	
HE 12F120	120	300	12	45	350	0.82	12	0.005	2.5	-50 ... +175	8 x 7,5	
HE 12FA ... HE 12FG	50-400	200	12	50	650	0.82	5	0.025	2.5	-50 ... +175	8 x 7,5	
HE 15FATL ... HE 15FGTL	50-400	200	15	50	700	0.82-0.84	5	0.025	1.8	-50 ... +175	8 x 7,5	
HE 20FA ... HE 20FG	50-400	200	20	50	700	0.82-0.84	5	0.025	1.5	-50 ... +175	8 x 7,5	
HE 25FA ... HE 25FG	50-400	200	25	50	700	0.82-0.84	5	0.025	0.8	-50 ... +175	8 x 7,5	
HE 25FATL ... HE 25FGTL	50-400	200	25	50	700	0.82-0.84	5	0.025	1	-50 ... +175	8 x 7,5	
<b>Ultrafast recovery</b>												
UF 600A ... UF 600M	50-1000	75-100	6	50	270	1.0-1.7	5	0.025	20	-50 ... +150	8 x 7,5	

Type	$V_{(BR)min.}$	$I_{FAV}$ @ $T_A$	$T_A$	$I_{FSM}$ @ $T_A=25^\circ C$	$V_F$ @ $I_F$ $T_j=25^\circ C$	$I_F-V_F$	$R_{th(j-a)}$	$T_j$	Case	Circuit
	V	A	°C	A	V	A	K/W	°C		
<b>Avalanche</b>										
SKa1	1300-1700	1.45	60	60	1.50	10	85	-40 ... +150	E33	
SKNa2	1300-1700	2	45	180	1.20	10	55	-40 ... +150	E5	
SKa3	1300-1700	3.3	90	180	1.20	10	60	-40 ... +150	E34	
SKNa4	1300-1700	3.7	35	190	1.20	10	25	-40 ... +150	E6	

# Discretes - Diodes - Leaded

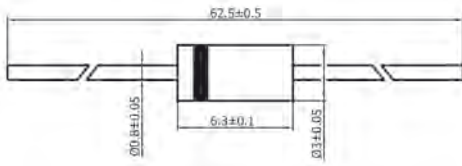
Type	$V_{RRM}$	$I_{FAV}$ @ $T_A$	$T_A$	$I_{FSM}$ @ $T_A=25^\circ C$	$V_F$ @ $I_F$ $T_j=25^\circ C$	$I_F-V_F$	$I_R$ @ $T_j=25^\circ C$	$R_{th(j-a)}$	$T_j$	Case	Circuit
	V	A	°C	A	V	A	mA	K/W	°C		
<b>Schottky</b>											
1N 5817 ... 1N 5819	20-40	1	50	40	0.75-0.9	3	1	45	-50 ... +150	DO-15	
SB 120 ... SB 1100	20-100	1	50	40	0.5-0.79	1	0.5	45	-50 ... +150	DO-15	
SB 220 ... SB 2100	20-100	2	50	50	0.5-0.79	2	0.5	45	-50 ... +150	DO-15	
1N 5820 ... 1N 5822	20-40	3	50	100	0.85-0.95	9	2	25	-50 ... +150	DO-201	
SB 320 ... SB 3100	20-100	3	50	100	0.5-0.79	3	0.5	25	-50 ... +150	DO-201	
SB 520 ... SB 5100	20-100	5	50	150	0.55-0.79	5	0.5	25	-50 ... +150	DO-201	
SB 820 ... SB 845	20-45	8	50	200	0.49	5	0.4	5	-50 ... +150	5,4 x 7,5	
SB 1020TL ... SB 1040TL	20-40	10	50	225	0.47	5	0.4	2.7	-50 ... +150	5,4 x 7,5	
SB 1220 ... SB 12100	20-100	12	50	280	0.45-0.75	5	0.5	4	-50 ... +150	5,4 x 7,5	
SB 1220TL ... SB 12100TL	20-100	12	75	300	0.45-0.75	5	0.5	2	-50 ... +150	5,4 x 7,5	
SB 1520 ... SB 15100	20-100	15	50	320	0.43-0.74	5	0.5	3	-50 ... +150	8 x 7,5	
SB 1520S ... SB 15100S	20-100	15	50	320	0.43-0.74	5	0.5	4	-50 ... +150	5,4 x 7,5	
SB 1520TL ... SB 15100TL	20-100	15	75	350	0.43-0.74	5	0.5	1.8	-50 ... +150	8 x 7,5	
SB 1820 ... SB 1840	20-40	18	50	450	0.39	5	0.5	3	-50 ... +150	8 x 7,5	
SB 2020TL ... SB 2040TL	20-40	20	50	550	0.39	5	0.5	1.8	-50 ... +150	8 x 7,5	
SB 2520 ... SB 2540	20-40	25	50	700	0.37	5	0.6	2.5	-50 ... +150	8 x 7,5	
SB 3020 ... SB 3040	20-40	30	75	700	0.37	5	0.6	0.8	-50 ... +150	8 x 7,5	
SB 3020TL ... SB 3040TL	20-40	30	50	700	0.37	5	0.6	1.7	-50 ... +150	8 x 7,5	
<b>High Temperature Schottky</b>											
SBH 820 ... SBH 845	20-45	8	50	180	0.53	5	0.04	5	-50 ... +200	5,4 x 7,5	
SBH 1020TL ... SBH 1045TL	20-45	10	50	250	0.53	5	0.04	2.5	-50 ... +200	5,4 x 7,5	
SBH 1220 ... SBH 1245	20-45	12	50	280	0.51	5	0.05	4	-50 ... +200	5,4 x 7,5	
SBH 1220TL ... SBH 1245TL	20-45	12	75	300	0.51	5	0.05	2	-50 ... +200	5,4 x 7,5	
SBH 1520 ... SBH 1545	20-45	15	50	350	0.48	5	0.05	3	-50 ... +185	8 x 7,5	
SBH 1520S ... SBH 1545S	20-45	15	50	350	0.48	5	0.05	4	-50 ... +185	5,4 x 7,5	
SBH 1520TL ... SBH 1560TL	20-60	15	75	380	0.48-0.6	5	0.05	1.8	-50 ... +185	8 x 7,5	
SBH 1820 ... SBH 1845	20-45	18	50	600	0.46	5	0.075	2.5	-50 ... +185	8 x 7,5	
SBH 2020TL ... SBH 2045TL	20-45	20	50	650	0.45	5	0.065	1.8	-50 ... +185	8 x 7,5	
SBH 2520 ... SBH 2540	20-40	25	50	700	0.45	5	0.1	2.5	-50 ... +175	8 x 7,5	
SBH 3020 ... SBH 3060	20-40	30	50	700	0.43	5	0.15	2.5	-50 ... +175	8 x 7,5	
SBH 3020TL ... SBH 3060TL	20-40	30	50	700	0.42	5	0.15	1.7	-50 ... +175	8 x 7,5	

Type	$V_{WM}$	$I_D$ @ $T_A$	$P_{PPM}$ @ $T_A$	$T_A$	$I_{FSM}$ @ $T_A=25^\circ C$	$V_{BR}$ @ $I_T$	$I_{T,VBR}$	$R_{th(j-a)}$	$T_j$	Case	Circuit
	V	A	W	°C	A	V	mA	K/W	°C		
<b>Transient voltage supressor</b>											
1,5 KE180 ... 1,5 KE440CA	146-376	0.000005	1500	25	200	162-462	1	25	-50 ... +175	5,4 x 7,5	
3 KP130 ... 3 KP180CA	130-180	0.000005	3000	25	250	144-231	1	18	-50 ... +175	8 x 7,5	
P4 KE180 ... P4 KE440CA	146-376	0.000005	400	25	40	162-462	1	45	-50 ... +175	DO-15	
P6 KE200 ... P6 KE440CA, P6 KE520C	162-423	0.000005	600	25	100	180-570	1	30	-50 ... +175	DO-15	
1,5 KE6,8 ... 1,5 KE170CA	5,5-145	0.001	1500	25	200	6,12-179	1-10	25	-50 ... +175	5,4 x 7,5	
BZW 04-5V8 ... BZW 04-376B	5,8-376	0.001	400	25	40	6,45-462	1-10	45	-50 ... +175	DO-15	
BZW 06-5V8 ... BZW 06-376B	5,8-376	0.001	600	25	100	6,45-462	1-10	45	-50 ... +175	DO-15	
P4 KE6,8 ... P4 KE170CA	5,5-145	0.001	400	25	40	6,12-179	1-10	45	-50 ... +175	DO-15	
P6 KE6,8 ... P6 KE180CA	5,5-154	0.001	600	25	100	6,12-189	1-10	30	-50 ... +175	DO-15	
5 KP6,5 ... 5 KP110CA	6,5-110	0.004	5000	25	400	7,22-140,5	5-50	18	-50 ... +175	8 x 7,5	

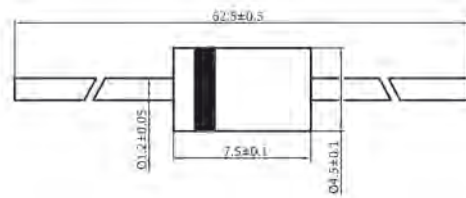
# Discretos - Diodes - Leaded

## Cases

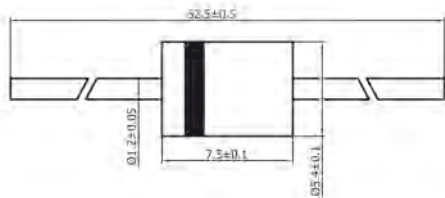
**DO-15**



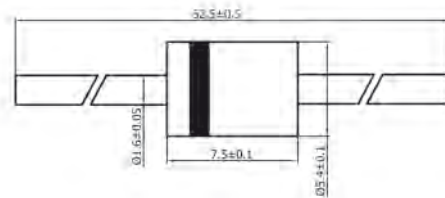
**DO-201**



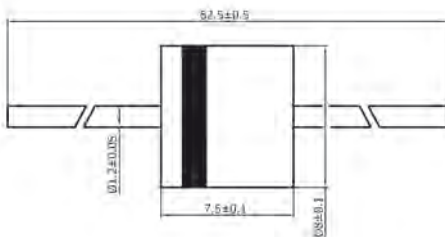
**Ø 5,4 x 7,5**



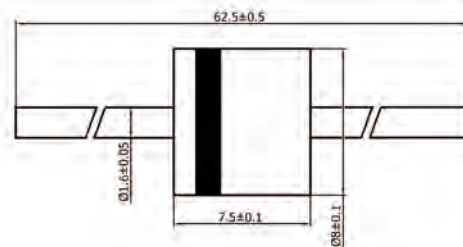
**Ø 5,4 x 7,5 TL**



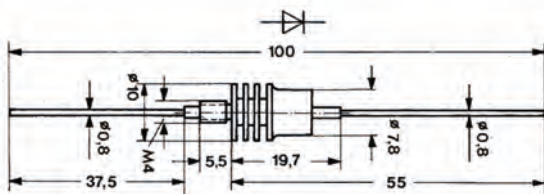
**Ø 8 x 7,5**



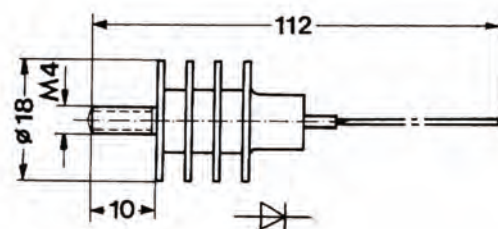
**Ø 8 x 7,5 TL**



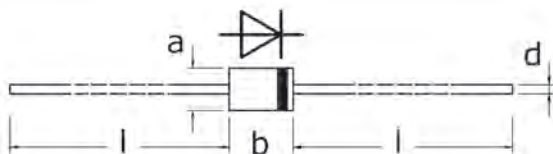
**E5**



**E6**



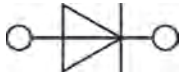
**E33 / E34**

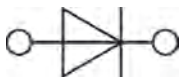


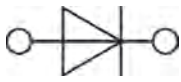
Cases	a	b	l	d
E 33	4,5	7	28	0,75
E 34	6	9	27	1,18

Dimensions in mm

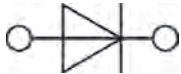
# Discretes - Diodes - Surface Mount


Type	$V_{RRM}$	$I_{FAV}$ @ $T_T$	$T_T$	$I_{FSM}$ @ $T_A=$ $25^{\circ}C$	$V_F$ @ $I_F$ $T_j=$ $25^{\circ}C$	$I_F-V_F$	$I_R$ @ $T_j=$ $25^{\circ}C$	$R_{th(j-a)}$	$T_j$	Case	Circuit
	V	A	$^{\circ}C$	A	V	A	mA	K/W	$^{\circ}C$		
<b>Standard recovery</b>											
S1 A ... S1 M	50-1000	1	100	30	1.10	1	0.005	70	-50 ... +150	SMA	
S1 T ... S1 Y	1300-2000	1	100	30	1.10	1	0.005	70	-50 ... +150	SMA	
SM 4001 ... SM 4007	50-1000	1	75	40	1.10	1	0.005	45	-50 ... +175	MELF	
SM 513, SM 516, SM 518, SM 2000	1300-2000	1	75	40	1.10	1	0.005	45	-50 ... +175	MELF	
S2 A ... S2 M	50-1000	2	100	50	1.15	2	0.005	60	-50 ... +150	SMB	
S2 SMA A ... S2 SMA M	50-1000	2	80	50	1.15	2	0.005	70	-50 ... +150	SMA	
S2 T ... S2 Y	1300-2000	2	100	50	1.15	2	0.005	60	-50 ... +150	SMB	
SM 5059 ... SM 5063	200-1000	2	50	50	1.10	2	0.005	45	-50 ... +175	MELF	
S3 A ... S3 M	50-1000	3	100	100	1.15	3	0.005	50	-50 ... +150	SMC	
S3 SMB A ... S3 SMB M	50-1000	3	90	100	1.15	3	0.005	60	-50 ... +150	SMB	
S3 T ... S3 Y	1300-2000	3	100	100	1.15	3	0.005	50	-50 ... +150	SMC	
SM 5400 ... SM 5408	50-1000	3	50	70	1.20	3	0.01	45	-50 ... +175	MELF	
S5 A ... S5 M	50-1000	5	100	225	1.15	5	0.01	50	-50 ... +150	SMC	

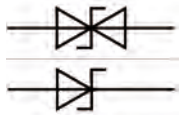
Type	$V_{RRM}$	$t_{tr}$	$I_{FAV}$ @ $T_T$	$T_T$	$I_{FSM}$ @ $T_A=$ $25^{\circ}C$	$V_F$ @ $I_F$ $T_j=$ $25^{\circ}C$	$I_F-V_F$	$I_R$ @ $T_j=$ $25^{\circ}C$	$R_{th(j-a)}$	$T_j$	Case	Circuit
	V	ns	A	$^{\circ}C$	A	V	A	mA	K/W	$^{\circ}C$		
<b>Fast recovery</b>												
FR 1A ... FR 1M	50-1000	150-500	1	100	30	1.30	1	0.005	70	-50 ... +150	SMA	
SA 154 ... SA 160	50-1000	300	1	100	35	1.30	1	0.005	45	-50 ... +175	MELF	
FR 2A ... FR 2M	50-1000	150-500	2	100	50	1.30	2	0.005	60	-50 ... +150	SMB	
SA 261 ... SA 265	1200-2000	500	2	100	50	1.80	2	0.005	45	-50 ... +175	MELF	
FR 3 SMB A ... FR 3 SMB M	50-1000	150-500	3	80	100	1.30	3	0.005	60	-50 ... +150	SMB	
FR 3A ... FR 3M	50-1000	150-500	3	100	100	1.30	3	0.005	50	-50 ... +150	SMC	
FR 5A ... FR 5M	50-1000	150-500	5	70	175	1.30	5	0.005	50	-50... +150	SMC	

Type	$V_{RRM}$	$t_{tr}$	$I_{FAV}$ @ $T_T$	$T_T$	$I_{FSM}$ @ $T_A=$ $25^{\circ}C$	$V_F$ @ $I_F$ $T_j=$ $25^{\circ}C$	$I_F-V_F$	$I_R$ @ $T_j=$ $25^{\circ}C$	$R_{th(j-a)}$	$T_j$	Case	Circuit
	V	ns	A	$^{\circ}C$	A	V	A	mA	K/W	$^{\circ}C$		
<b>Ultrafast recovery</b>												
SUF 4001 ... SUF 4007	50-1200	50-75	1	50	27	1-1.7	1	0.01	45	-50 ... +175	MELF	
US 1A ... US 1S	50-1200	50-75	1	100	30	1-1.7	1	0.01	70	-50 ... +150	SMA	
US 2A ... US 2S	50-1200	50-75	2	100	50	1-1.7	2	0.01	60	-50 ... +150	SMB	
US 2SMA A ... US 2SMA M	50-1000	50-75	2	50	50	1-1.7	2	0.01	70	-50 ... +150	SMA	
US 3SMB A ... US 3SMB M	50-1000	50-75	2.5	70	70	1-1.7	2.5	0.01	60	-50 ... +150	SMB	
US 3A ... US 3S	50-1200	50-75	3	100	100	1-1.7	3	0.01	50	-50 ... +150	SMC	


# Discretes - Diodes - Surface Mount

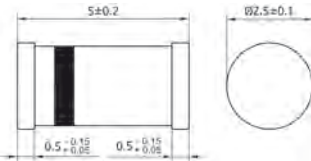
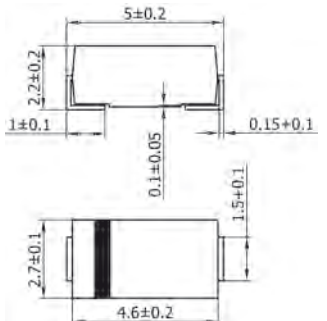
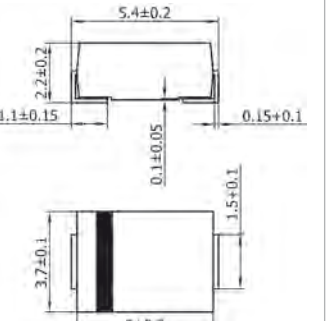
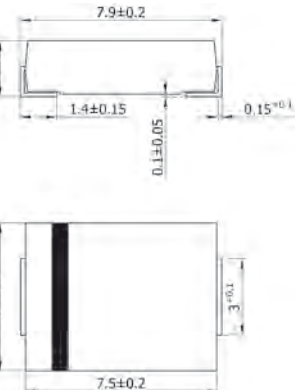
Type	$V_{(BR)min.}$	$t_{rr}$	$I_{FAV}$ @ $T_T$	$T_T$	$I_{FSM}$ @ $T_A=25^\circ C$	$V_F @ I_F$ $T_j=25^\circ C$	$I_F - V_F$	$I_R$ @ $T_j=25^\circ C$	$R_{th(j-a)}$	$T_j$	Case	Circuit
	V	ns	A	°C	A	V	A	mA	K/W	°C		
<b>Avalanche</b>												
FRA 1A ... FRA 1M	50-1000	150-500	1	100	30	1,3	1	0.015	70	-50 ... +150	SMA	
SA 1A ... SA 1M	50-1000	-	1	100	30	1,1	1	0.001	70	-50 ... +150	SMA	
SAA 154 ... SAA 160	50-1000	300	1	100	35	1,3	1	0.015	45	-50 ... +175	MELF	
SAM 4001 ... SAM 4007	50-1000	-	1	75	40	1,1	1	0.001	45	-50 ... +175	MELF	
SUFA4001 ... SUFA4007	50-1000	50-75	1	50	27	1-1,7	1	0.005	45	-50 ... +175	MELF	
USA 1A ... USA 1M	50-1000	50-75	1	90	30	1-1,7	1	0.005	70	-50 ... +150	SMA	
FRA 2A ... FRA 2M	50-1000	150-500	2	100	50	1,3	2	0.015	60	-50 ... +150	SMB	
SA 2A ... SA 2 M	50-1000	-	2	100	50	1,15	2	0.001	60	-50 ... +150	SMB	
USA 2A ... USA 2M	50-1000	50-75	2	90	50	1-1,7	2	0.01	60	-50 ... +150	SMB	
FRA 3A ... FRA 3M	50-1000	150-500	3	100	100	1,3	3	0.015	50	-50 ... +150	SMC	
SA 3A ... SA 3M	50-1000	-	3	100	100	1,15	3	0.001	50	-50 ... +150	SMC	
USA 3A ... USA 3M	50-1000	50-75	3	90	100	1-1,7	3	0.01	50	-50 ... +150	SMC	

Type	$V_{RRM}$	$I_{FAV}$ @ $T_T$	$T_T$	$I_{FSM}$ @ $T_A=25^\circ C$	$V_F @ I_F$ $T_j=25^\circ C$	$I_F - V_F$	$I_R$ @ $T_j=25^\circ C$	$R_{th(j-a)}$	$T_j$	Case	Circuit
	V	A	°C	A	V	A	mA	K/W	°C		
<b>Schottky</b>											
SK 12 ... SK 110	20-100	1	100	30	0.5-0.85	2	0.5	70	-50 ... +150	SMA	
SM 5817 ... SM 5819	20-40	1	100	30	0.75-0.9	1	0.1	45	-50 ... +150	MELF	
SMS 120 ... SMS 1100	20-100	1	100	30	0.5-0.79	1	0.5	45	-50 ... +150	MELF	
SK 22 ... SK 210	20-100	2	100	50	0.5-0.85	2	0.5	60	-50 ... +150	SMB	
SMS 220 ... SMS 2100	20-100	2	100	50	0.5-0.79	2	0.5	45	-50 ... +150	MELF	
SK 32 ... SK 310	20-100	3	100	100	0.5-0.85	3	0.5	50	-50 ... +150	SMC	

Type	$V_{WM}$	$I_D$ @ $T_A$	$P_{PPM}$ @ $T_A$	$T_A$	$I_{FSM}$ @ $T_A=25^\circ C$	$V_{BR}$ @ $I_T$	$I_{T\_VBR}$	$R_{th(j-a)}$	$T_j$	Case	Circuit
	V	A	W	°C	A	V	mA	K/W	°C		
<b>Transient voltage supressor</b>											
1,5 SMCJ 160 ... 1,5 SMCJ 180CA	160-180	0.000005	1500	25	100	178-231	1	50	-50 ... +150	SMC	
P4 SMAJ 150 ... P4 SMAJ 180CA	150-180	0.000005	400	25	40	167-231	1	70	-50 ... +150	SMA	
P6 SMBJ 150 ... P6 SMBJ 180CA	150-180	0.000005	600	25	100	167-255	1	60	-50 ... +150	SMB	
TGL 41-520C	423	0.000005	400	25	40	470-570	1	45	-50 ... +150	MELF	
1,5 SMCJ 6,5 ... 1,5 SMCJ 150CA	6,5-150	0.0005	1500	25	100	7,2-185	1-10	50	-50 ... +150	SMC	
P4 SMAJ 6,5 ... P4 SMAJ 130CA	6,5-130	0.0005	400	25	40	7,2-160	1-10	70	-50 ... +150	SMA	
P6 SMBJ 6,5 ... P6 SMBJ 130CA	6,5-130	0.0005	600	25	100	7,2-176	1-10	60	-50 ... +150	SMB	
P4 SMA 6,8 ... P4 SMA 440CA	5,5-342	0.001	400	25	40	6,12-420	1-10	70	-50 ... +150	SMA	
P6 SMB 6,8 ... P6 SMB 400CA	5,5-342	0.001	600	25	100	6,12-420	1-10	60	-50 ... +150	SMB	
SDA 2AK, SDA 4AK	0,5-1	0.001	300	25	-	0,8-2	1000	45	-50 ... +150	MELF	
TGL 41-6,8 ... TGL 41-400CA	5,5-342	0.001	400	25	40	6,12-420	1-10	45	-50 ... +150	MELF	

# Discretes - Diodes - Surface Mount

Type	$V_Z$ @ $I_{ZT}$	$I_{ZT}$ @ $T_A$	$P_{tot}$ @ $T_A$	$T_A$	$V_R$ @ $I_R$ $T_j = 25^\circ\text{C}$	$I_R - V_R$	$R_{th(j-a)}$	$T_j$	Case	Circuit
	V	A	W	°C	V	µA	K/W	°C		
<b>Zener</b>										
Z1 SMA 1 ... Z1 SMA 100 (1W)	0,71-106	0,005	1	50	1,5-75	1	70	-50 ... +150	SMA	
SMZ 1 ... SMZ 200 (2W)	0,71-212	0,1	2	50	1,5-90	0,5-1	45	-50 ... +150	MELF	
SZ3C 1 ... SZ3C 200 (3W)	0,71-212	0,1	3	50	1,5-90	1	33	-50 ... +150	MELF	
Z2 SMA 1 ... Z2 SMA 200 (2W)	0,71-212	0,1	2	50	1,5-90	1	70	-50 ... +150	SMA	
Z2 SMB 1 ... Z2 SMB 200 (2W)	0,71-212	0,1	2	50	1,5-90	1	60	-50 ... +150	SMB	
Z3 SMB 1 ... Z3 SMB 200 (3W)	0,71-212	0,1	3	50	1,5-90	1	60	-50 ... +150	SMB	
Z3 SMC 1 ... Z3 SMC 200 (3W)	0,71-212	0,1	3	50	1,5-90	1	33	-50 ... +150	SMC	
ZMY 1 ... ZMY 200 (1,3W)	0,71-212	0,1	1,3	50	1,5-90	0,5-1	45	-50 ... +150	MELF	
Z5 SMC 1 ... Z5 SMC 200 (5W)	0,71-211	0,15	5	75	6,9-152	0,5-7,5	33	-50 ... +150	SMC	

<b>Cases</b>			
MELF	SMA	SMB	SMC
			

Dimensions in mm

# Discretes - Diodes - Stud Screw Fit

Type	$V_{RRM}$	$I_{FAV}$ @ $T_C$	$T_C$	$I_{FSM}$ @ $T_j = 25^\circ C$	$V_F$ @ $I_F$ $T_j = 25^\circ C$	$I_F - V_F$	$R_{th(j-c)}$	$T_j$	also available with UNF-thread	Case	Circuit
	V	A	°C	A	V	A	K/W	°C			
<b>Standard recovery</b>											
SKN 20	400-1600	20	125	375	1.55	60	2	-40 ... +180	yes	E9	
SKN 26	400-1600	25	100	375	1.55	60	2	-40 ... +180	yes	E8	
SKN 45	400-1600	45	125	700	1.60	150	0.85	-40 ... +180	yes	E12	
SKN 70	400-1600	70	125	1150	1.50	200	0.55	-40 ... +180	yes	E12	
SKN 71	400-1600	70	125	1150	1.50	200	0.55	-40 ... +180	yes	E11	
SKN 100	400-1800	100	120	1750	1.55	400	0.45	-40 ... +180	yes	E13	
SKN 130	400-1800	130	125	2500	1.50	500	0.35	-40 ... +180	yes	E14	
SKN 240	400-1800	240	125	6000	1.40	750	0.2	-40 ... +180	yes	E15	
SKN 320	400-1600	320	125	9000	1.35	1000	0.16	-40 ... +180	yes	E16	
SKN 400	1800-3000	400	100	9000	1.45	1200	0.11	-40 ... +160	yes	E17	
SKR 20	400-1600	20	125	375	1.55	60	2	-40 ... +180	yes	E9	
SKR 26	400-1600	25	100	375	1.55	60	2	-40 ... +180	yes	E8	
SKR 45	400-1600	45	125	700	1.60	150	0.85	-40 ... +180	yes	E12	
SKR 70	400-1600	70	125	1150	1.50	200	0.55	-40 ... +180	yes	E12	
SKR 71	400-1600	70	125	1150	1.50	200	0.55	-40 ... +180	yes	E11	
SKR 100	400-1800	100	120	1750	1.55	400	0.45	-40 ... +180	yes	E13	
SKR 130	400-1800	130	125	2500	1.50	500	0.35	-40 ... +180	yes	E14	
SKR 240	400-1800	240	125	6000	1.40	750	0.2	-40 ... +180	yes	E15	
SKR 320	400-1600	320	125	9000	1.35	1000	0.16	-40 ... +180	yes	E16	

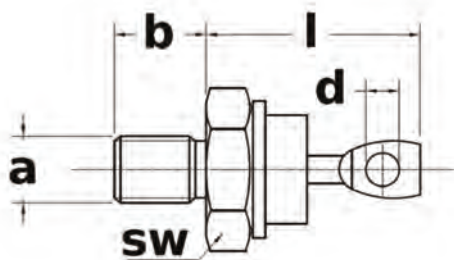
Type	$V_{RRM}$	$t_{tr}$	$I_{FAV}$ @ $T_C$	$T_C$	$I_{FSM}$ @ $T_j = 25^\circ C$	$V_F$ @ $I_F$ $T_j = 25^\circ C$	$I_F - V_F$	$R_{th(j-c)}$	$T_j$	also available with UNF-thread	Case	Circuit
	V	ns	A	°C	A	V	A	K/W	°C			
<b>Fast recovery</b>												
SKN 2F17	400-1000	440	17	113	450	2.15	50	1.2	-40 ... +150	yes	E7	
SKN 3F20	800-1200	600	20	104	375	2.15	50	1.2	-40 ... +150	yes	E7	
SKN 2F50	400-1000	600	50	105	1100	1.80	50	0.5	-40 ... +150	yes	E10	
SKN 60F	1200-1700	2100	60	100	1400	1.75	150	0.5	-40 ... +150	yes	E10	
SKN 135F	800-1200	1900	135	100	2500	1.95	300	0.2	-40 ... +150	yes	E14	
SKN 136F	800-1200	1900	135	100	2500	1.95	300	0.2	-40 ... +150	yes	E31	
SKN 140F	1200-1700	2000	140	100	2500	1.80	300	0.2	-40 ... +150	yes	E14	
SKN 141F	1200-1700	2000	140	100	2500	1.80	300	0.2	-40 ... +150	yes	E31	
SKR 2F17	400-1000	440	17	113	450	2.15	50	1.2	-40 ... +150	yes	E7	
SKR 3F20	800-1200	600	20	104	375	2.15	50	1.2	-40 ... +150	yes	E7	
SKR 2F50	400-1000	600	50	95	800	1.80	50	0.65	-40 ... +150	yes	E10	
SKR 60F	1200-1700	2100	60	100	1400	1.75	150	0.5	-40 ... +150	yes	E10	
SKR 135F	800-1200	1900	135	100	2500	1.95	300	0.2	-40 ... +150	yes	E14	
SKR 136F	800-1200	1900	135	100	2500	1.95	300	0.2	-40 ... +150	yes	E31	
SKR 140F	1200-1700	2000	140	100	2500	1.80	300	0.2	-40 ... +150	yes	E14	
SKR 141F	1200-1700	2000	140	100	2500	1.80	300	0.2	-40 ... +150	yes	E31	

# Discretes - Diodes - Stud Screw Fit

Type	$V_{RRM}$	$I_{FAV}$ @ $T_C$	$T_C$	$I_{FSM}$ @ $T_j = 25^\circ C$	$V_F$ @ $I_F$ $T_j = 25^\circ C$	$I_F - V_F$	$R_{th(j-c)}$	$T_j$	also available with UNF-thread	Case	Circuit
	V	A	°C	A	V	A	K/W	°C			
<b>Avalanche</b>											
SKNa 20	1300-1700	20	93	375	1.55	60	2	-40 ... +150	no	E9	
SKNa 22	3600-5000	25	104	450	1.95	60	1	-40 ... +160	no	E42	
SKNa 47	3600-5000	45	106	700	1.80	100	0.6	-40 ... +160	no	E43	
SKNa 102	3600-5000	125	80	1900	1.90	300	0.3	-40 ... +160	no	E44	
SKNa 202	3600-5000	200	80	3800	1.95	600	0.2	-40 ... +160	no	E45	
SKNa 402	3600-5000	400	88	7800	1.85	1200	0.1	-40 ... +160	no	E46	

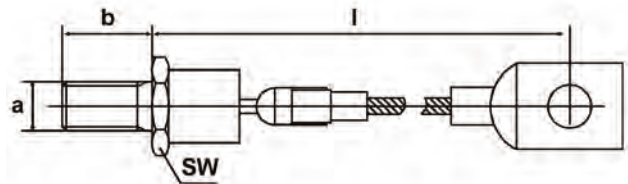
## Cases

### E7 / E8 / E10 / E11 / E31



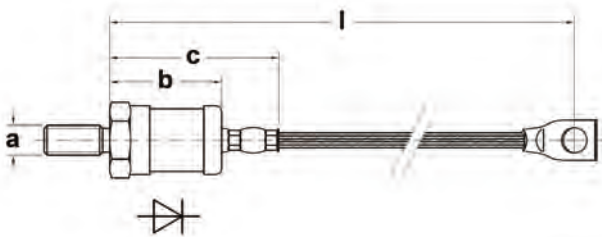
Cases	a	b	d	l	sw
E 7	M 5	11	2,7	22	11
E 8	M 6	11	2,7	21,5	11
E 10	M 6	11	4	25	17
E 11	M 8	11	4	25,5	17
E 31	M 12	18	8,4	55	24

### E9 / E12 ... E17



Cases	a	b	l	SW
E 9	M 6	11	130	11
E 12	M 8	11	135	17
E 13	M 12	18	165	24
E 14	M 12	18	165	24
E 15	M 16 x 1,5	20	190	32
E 16, E 17	M 24 x 1,5	20	230	41

### E 42 / E 43 / E 44 / E 45 / E 46



Cases	a	b	c	l
E 42	M 6	28.5	45	150
E 43	M 8	32	54	160
E 44	M 12	38	57	185
E 45	M 16 x 1,5	48	70	205
E 46	M 24 x 1,5	54	82	250

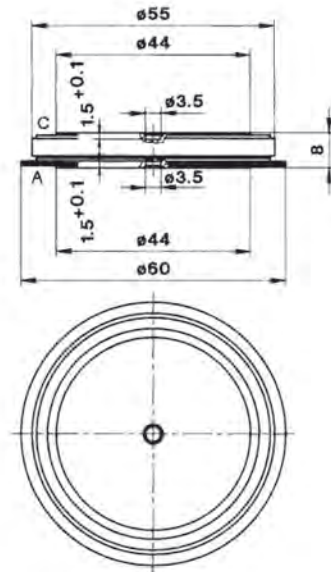
Dimensions in mm

# Discretes - Diodes - Capsule

Type	$V_{RRM}$ V	$I_{FAV}$ @ $T_C$ A	$T_C$ °C	$I_{FSM}$ @ $T_j = 25^\circ\text{C}$ A	$V_F$ @ $I_F$ $T_j = 25^\circ\text{C}$ V	$I_F - V_F$ A	$R_{th(j-c)}$ per chip K/W	$T_j$ °C	Case	Circuit
SKN 4000	200-600	4000	50	60000	1.30	14000	0.03	-40 ... +180	E35	
SKN 6000	200-600	6000	85	60000	1.30	14000	0.012	-40 ... +180	E35	

## Cases

### E35



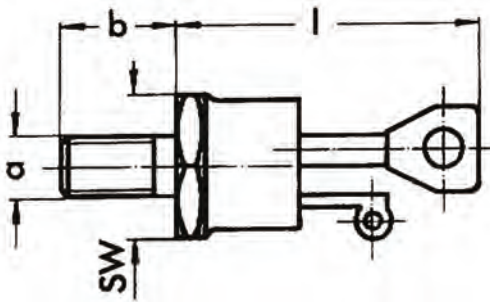
Dimensions in mm

# Discretes - Thyristor - Stud Screw Fit

Type	$V_{RRM}$ $V_{DRM}$	$I_{TAV}$ @ $T_C$	$T_C$	$I_{TSM}$ @ $T_j = 25^\circ C$	$V_T$ @ $I_T$ $T_j = 25^\circ C$	$I_T - V_T$	$R_{th(j-c)}$ @sin. 180°	$T_j$	also available with UNF-thread	Case	Circuit
	V	A	°C	A	V	A	K/W	°C			
SKT 10	600-1200	10	111	250	1.6	30	1.3	-40 ... +130	no	B1	
SKT 16	400-1800	16	104	370	2.4	75	0.9	-40 ... +130	yes	B2	
SKT 24	400-1800	24	95	450	1.9	75	0.9	-40 ... +130	yes	B2	
SKT 40	400-1800	40	80	700	1.95	120	0.66	-40 ... +130	no	B3	
SKT 50	600-1800	50	78	1050	1.8	120	0.6	-40 ... +130	yes	B3	
SKT 55	400-1800	55	92	1300	1.8	200	0.47	-40 ... +130	no	B5	
SKT 80	600-1800	80	85	1700	2.25	300	0.28	-40 ... +130	yes	B5	
SKT 100	400-1800	100	85	2000	1.75	300	0.28	-40 ... +130	yes	B5	
SKT 130	400-1600	130	85	3500	2.25	500	0.18	-40 ... +130	no	B6	
SKT 160	400-1600	160	84	4300	1.75	500	0.18	-40 ... +130	yes	B6	
SKT 250	400-1600	250	85	7000	1.65	800	0.123	-40 ... +130	no	B7	
SKT 300	400-1600	300	93	11000	1.45	800	0.096	-40 ... +130	yes	B7	

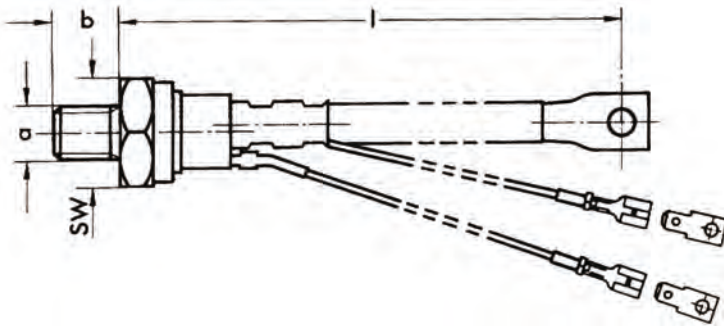
## Cases

### B1 ... B3



Cases	a	b	l	SW
B 1	M 5	11	20,3	11
B 2	M 6	11	30	14
B 3	M 8	11	33,5	17

### B5 ... B7



Cases	a	b	l	SW
B 5	M 12	18	160	24
B 6	M 16 x 1,5	20	190	32
B 7	M 24 x 1,5	20	230	41

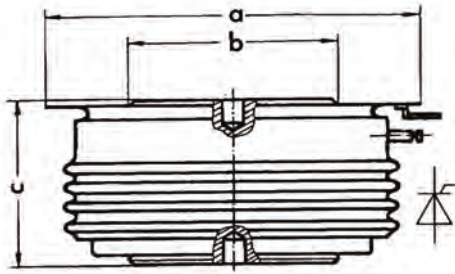
Dimensions in mm

# Discretes - Thyristor - Capsule

Type	$V_{RRM}$ $V_{DRM}$	$I_{TAV}$ @ $T_c$	$T_c$	$I_{TSM}$ @ $T_j = 25^\circ C$	$V_T @ I_T$ $T_j = 25^\circ C$	$I_T - V_T$	$R_{th(j-c)}$ @sin. 180°	$T_j$	Case	Circuit
	V	A	°C	A	V	A	K/W	°C		
SKT 240	400-1800	240	93	5000	2.3	1000	0.072	-40 ... +125	B8	
SKT 340	800-1800	340	82	5700	1.9	1000	0.072	-40 ... +125	B8	
SKT 491	400-1800	490	80	8000	2.1	1500	0.047	-40 ... +125	B11	
SKT 493	400-1800	490	80	8000	2.1	1500	0.047	-40 ... +125	B11a	
SKT 551	800-1800	550	85	9000	1.65	1500	0.047	-40 ... +125	B11	
SKT 553	400-1800	550	85	9000	1.65	1500	0.047	-40 ... +125	B11a	
SKT 600	800-1800	600	86	11500	2	2400	0.04	-40 ... +125	B10	
SKT 760	800-1800	760	80	15000	1.65	2400	0.04	-40 ... +125	B10	
SKT 1000	1200-2800	1000	85	19000	2	3600	0.022	-40 ... +125	B14	
SKT 1200	1200-1800	1200	85	30000	1.65	3600	0.022	-40 ... +125	B14	
SKT 1400	2600-3600	1400	66	29000	2.1	3000	0.018	-40 ... +125	B19	
SKT 1800	1200-1600	1800	85	53000	1.25	3000	0.016	-40 ... +125	B19	
SKT 2000	2200-2800	2000	75	45000	1.8	3000	0.011	-40 ... +125	B20	
SKT 2400	1200-1800	2400	76	55000	1.37	3000	0.011	-40 ... +125	B20	

## Cases

### B8 ... B20



Cases	a	b	c
B 8	41	19	14
B 10	57,3	34	26
B 11	41	25	14
B 11a	41	25	14
B 14	73	47	26
B 19	102	63	33
B 20	111	73	37

Dimensions in mm

# Discretes - Chips - SEMICELL

Type	$V_{RRM}$	$I_F$ @ $T_j = 150^\circ\text{C}$	$I_{FSM}$ @ $T_j = 150^\circ\text{C}$ 10ms	$V_F$ @ $T_j = 25^\circ\text{C}$	$I_F @ V_F$ $T_j = 25^\circ\text{C}$	$Q_{rr}$ @ $T_j = 125^\circ\text{C}$
	V	A	A	V	A	$\mu\text{C}$
<b>600 V - Freewheeling Diodes CAL I3 Fast</b>						
SKCD 06 C 060 I3	600	15	-	1.35	10	0.7
SKCD 09 C 060 I3	600	20	100	1.35	15	1.2
SKCD 18 C 060 I3	600	30	200	1.35	25	2.5
SKCD 31 C 060 I3	600	50	440	1.35	50	3.3
SKCD 47 C 060 I3	600	80	720	1.35	85	5.5
SKCD 61 C 060 I3	600	100	1000	1.35	110	7
SKCD 81 C 060 I3	600	150	1260	1.35	155	8.5
SKCD 121 C 060 I3	600	210	2100	1.35	245	10.7
<b>1200 V - Freewheeling Diodes CAL I3 Fast</b>						
SKCD 06 C 120 I3	1200	10	-	2.00	5	-
SKCD 11 C 120 I3	1200	15	-	2.00	10	-
SKCD 18 C 120 I3	1200	25	180	2.00	15	2.7
SKCD 23 C 120 I3	1200	30	250	2.00	25	3.7
SKCD 31 C 120 I3	1200	40	350	2.00	35	4.5
SKCD 47 C 120 I3	1200	55	550	2.00	55	8
SKCD 61 C 120 I3	1200	75	720	2.00	70	11
SKCD 81 C 120 I3	1200	100	900	2.00	100	15
SKCD 121 C 120 I3	1200	150	-	2.00	155	-
<b>1700 V - Freewheeling Diodes CAL Fast</b>						
SKCD 47 C 170 I	1700	55	550	2.05	55	15
SKCD 61 C 170 I	1700	75	720	2.05	75	19

Type	$V_{RRM}$	$I_F$ @ $T_j = 175^\circ\text{C}$	$I_{FSM}$ @ $T_j = 150^\circ\text{C}$ 10ms	$V_F$ @ $T_j = 25^\circ\text{C}$	$I_F @ V_F$ $T_j = 25^\circ\text{C}$	$E_{off}$ @ $T_j = 150^\circ\text{C}$
	V	A	A	V	A	mJ
<b>1200 V - Freewheeling Diodes CAL I4 Fast</b>						
SKCD 08 C 120 I4F	1200	8	36	2.33	8	0.4
SKCD 11 C 120 I4F	1200	15	65	2.38	15	0.6
SKCD 16 C 120 I4F	1200	25	100	2.41	25	1
SKCD 22 C 120 I4F	1200	35	170	2.30	35	1.6
SKCD 31 C 120 I4F	1200	50	270	2.22	50	2.6
SKCD 46 C 120 I4F	1200	75	430	2.17	75	4.2
SKCD 46 C 120 I4F R	1200	75	430	2.17	75	4.2
SKCD 53 C 120 I4F	1200	100	550	2.20	100	5.4
SKCD 81 C 120 I4F	1200	150	900	2.14	150	8.7

# Discretes - Chips - SEMICELL

Type	$V_{RRM}$	$I_F$ @ $T_j = 175^\circ\text{C}$	$I_{FSM}$ @ $T_j = 150^\circ\text{C}$ 10ms	$V_F$ @ $T_j = 25^\circ\text{C}$	$I_F @ V_F$ $T_j = 25^\circ\text{C}$	$Q_{rr}$ @ $T_j = 150^\circ\text{C}$
	V	A	A	V	A	$\mu\text{C}$
<b>600 V - Freewheeling Diodes CAL High Density</b>						
SKCD 04 C 060 I HD	600	10	65	1.35	7	0.89
SKCD 06 C 060 I HD	600	20	95	1.35	12	0.93
SKCD 09 C 060 I HD	600	30	160	1.35	19	1.6
SKCD 16 C 060 I HD	600	50	320	1.35	37	5.64
SKCD 24 C 060 I HD	600	75	395	1.35	60	7.8
SKCD 42 C 060 I HD	600	100	810	1.35	110	14
SKCD 61 C 060 I HD	600	150	1080	1.35	160	22
SKCD 81 C 060 I HD	600	200	1310	1.35	230	32

Type	$V_{RRM}$	$I_F$ @ $T_j = 150^\circ\text{C}$	$I_{FSM}$ @ $T_j = 150^\circ\text{C}$ 10ms	$V_F$ @ $T_j = 25^\circ\text{C}$	$I_F @ V_F$ $T_j = 25^\circ\text{C}$	$Q_{rr}$ @ $T_j = 125^\circ\text{C}$
	V	A	A	V	A	$\mu\text{C}$
<b>1200 V - Freewheeling Diodes CAL High Density</b>						
SKCD 06 C 120 I HD	1200	6	55	1.50	5	1.4
SKCD 11 C 120 I HD	1200	15	125	1.50	12	3.3
SKCD 14 C 120 I HD	1200	20	170	1.50	15	4.2
SKCD 18 C 120 I HD	1200	25	200	1.50	20	5
SKCD 31 C 120 I HD	1200	55	480	1.50	45	10
SKCD 47 C 120 I HD	1200	85	640	1.50	70	12
SKCD 61 C 120 I HD	1200	115	900	1.50	90	18
SKCD 81 C 120 I HD	1200	160	1100	1.50	130	23
<b>1700 V - Freewheeling Diodes CAL High Density</b>						
SKCD 47 C 170 I HD	1700	75	650	1.73	75	19
SKCD 61 C 170 I HD	1700	100	710	1.73	100	26
SKCD 81 C 170 I HD	1700	150	1070	1.73	150	44

# Discretes - Chips - SEMICELL

Type	solderable	$V_{RRM}$	$I_{F(DC)}$ @ $T_j = 150^\circ\text{C}$	$I_{FSM}$ @ $T_j = 150^\circ\text{C}$ 10ms	$V_F$ @ $T_j = 25^\circ\text{C}$	$I_F @ V_F$ $T_j = 25^\circ\text{C}$	$t_{rr}$ @ $T_j = 25^\circ\text{C}$ 10ms
		V	A	A	V	A	$\mu\text{s}$
<b>1600 V - Rectifier</b>							
SKR 3,5 Qu bond	on request	1600	25	200	1	8	20
SKR 4,2 Qu bond	on request	1600	35	270	1	13	20
SKR 4,8 Qu bond	yes	1600	45	350	1	18	21
SKR 5,6 Qu bond	on request	1600	50	490	1	25	22
SKR 6,2 Qu bond	yes	1600	65	600	1	33	22
SKR 7,0 Qu bond	on request	1600	75	890	1	45	23
SKR 8,9 Qu bond	yes	1600	140	1380	1	77	26
SKR 10,3 Qu bond	yes	1600	170	1650	1	106	29
SKR 12,4 Qu bond	yes	1600	235	2300	1	160	34
SKR 15,2 Qu bond	on request	1600	330	3800	1	245	42
SKR 16,3 x 18,2 Qu bond	on request	1600	365	5100	1	320	49
SKR 18,2 Qu bond	on request	1600	380	5500	1	360	53
SKR 22,4 Qu bond	on request	1600	770	9450	1	550	72

Type	solderable	$V_{RRM}$ $V_{DRM}$	$I_{T(DC)}$ @ $T_c = 80^\circ\text{C}$ , $T_j = 130^\circ\text{C}$	$I_{TSM}$ @ $T_j = 130^\circ\text{C}$ 10ms	$V_{GT}$ @ $T_j = 25^\circ\text{C}$	$I_{GT}$ @ $T_j = 25^\circ\text{C}$	$t_g$ @ $T_j = 130^\circ\text{C}$ 10ms
		V	A	A	V	A	$\mu\text{s}$
<b>1600 V - Thyristor Central Gate</b>							
SKT 8,9 Qu ZG bond.	on request	1600	105	1000	1.98	100	150
SKT 10,3 Qu ZG bond.	on request	1600	125	1250	1.98	100	150
SKT 13,5 Qu ZG bond.	on request	1600	185	2300	1.98	100	135
SKT 15,2 Qu ZG bond.	yes	1600	215	3200	1.98	100	150
SKT 18,2 Qu ZG bond.	on request	1600	250	5000	1.98	100	150
SKT 24,3 Qu ZG bond.	on request	1600	480	8200	1.98	150	150
<b>1600 V - Thyristor Corner Gate</b>							
SKT 5,6 Qu RG bond.	on request	1600	60	280	1.98	100	150
SKT 7,0 Qu RG bond.	on request	1600	75	450	1.98	100	150
SKT 8,9 Qu RG bond.	yes	1600	105	1000	1.98	100	150
SKT 10,3 Qu RG bond.	on request	1600	125	1250	1.98	100	150
SKT 12,4 Qu RG bond.	yes	1600	165	1800	1.98	100	150
<b>1800 V - Thyristor Corner Gate</b>							
SKT 7,0 Qu RG sold Ag /18	yes	1800	75	480	1.98	100	150
SKT 8,9 Qu RG sold Ag /18	yes	1800	105	850	1.98	100	160
SKT 9,9 Qu RG sold Ag /18	yes	1800	120	1200	1.98	100	170
SKT 11,9 Qu RG sold Ag /18	yes	1800	150	1900	1.98	100	200