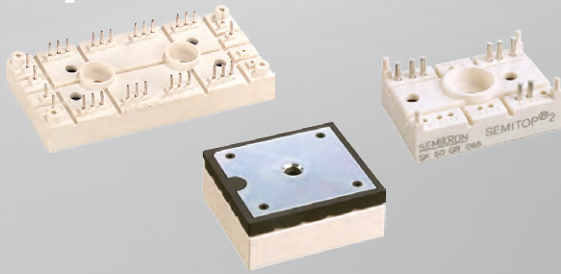


# Bridge Rectifier

## Input rectifier+brake chopper



55A

140A

170A

260A

## 3 phase input



40A

110A

40A

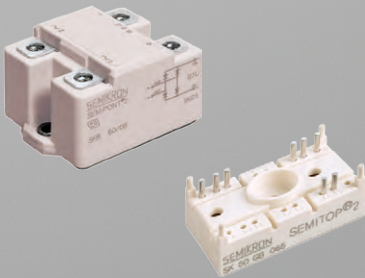
140A

35A

220A

240A 340A

## Single phase input



30A

46A

24A

46A

2A

85A

## Miniature Bridge Rectifier

### Leaded



9A

50A

### Fast on



17A

35A

$I_D$  [A]

2

9

24

30

35

40

46

55

85

110

140

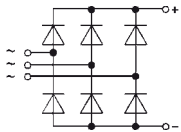
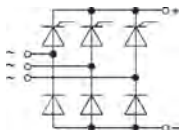
170

220

260

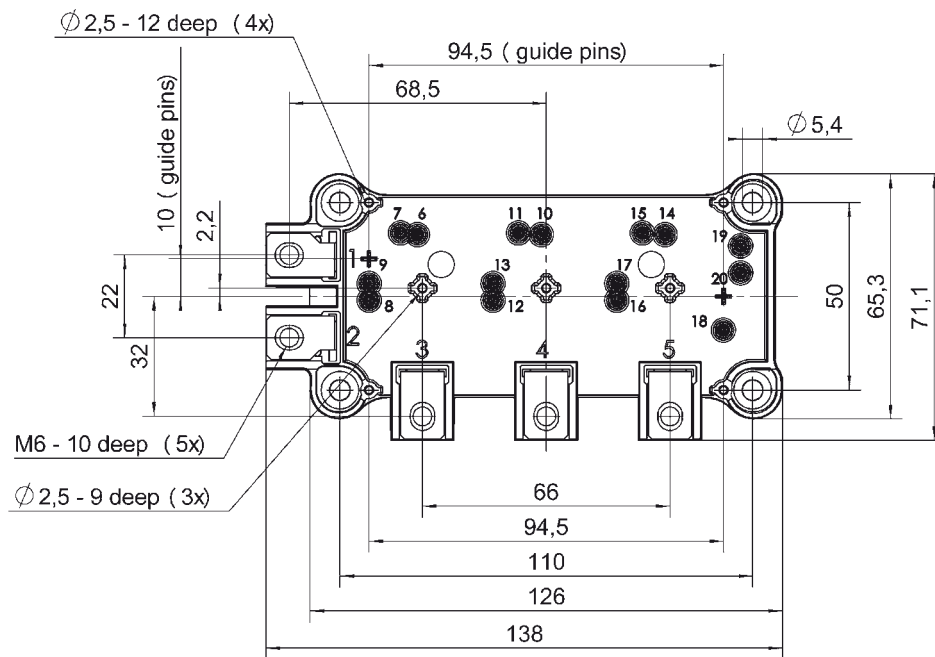
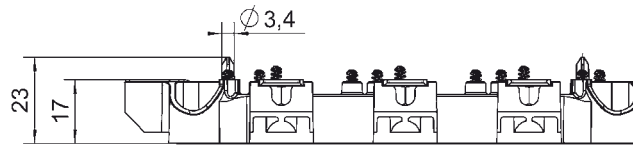
340

# Modules - Bridge - SEMiX

Type	$V_{RRM}$	$V_{DRM}$	$I_D$ @ $T_C$	$T_C$	$I_{TSM}$ @ $T_{jmax}$	$I_{FSM}$ @ $T_{jmax}$	$V_{T(TO)}$ @ $T_{jmax}$	$r_T$ @ $T_{jmax}$	$R_{th(j-c)}$ per chip	$R_{th(c-s)}$ per module	$T_j$	Case	Circuit
	V	V	A	°C	A	A	V	mΩ	K/W	K/W	°C		
SEMiX251D12Fs	1200		250	85	1330		1.2	7	0.26	0.04	-40 ... +150	13	
SEMiX341D16s	1600		340	85	2000		0.9	2.7	0.22	0.04	-40 ... +130	13	
SEMiX241DH16s	1600		240	85	1900		0.85	4	0.32	0.04	-40 ... +130	13	

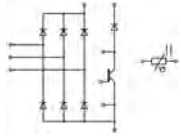
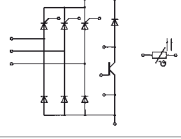
## Cases

### SEMiX 13



Dimensions in mm

# Modules - Bridge - MiniSKiiP

Type	IGBT						Diode				Case	Circuit
	$I_C$ @ $T_s=25^\circ\text{C}$	$I_{Cnom}$	$V_{CE(sat)}$ @ $T_j=25^\circ\text{C}$ typ.	$E_{on}$	$E_{off}$	$R_{th(j-s)}$	$I_F$ @ $T_s=25^\circ\text{C}$	$V_F$ @ $T_j=25^\circ\text{C}$ typ.	$E_{rr}$	$R_{th(j-s)}$		
	A	A	V	mJ	mJ	K/W	A	V	mJ	K/W		
<b>1200 V - IGBT 3 (Trench)</b>												
SKiiP 28ANB16V1	118	105	1.7	13.1	13	0.4	118	1.60	11.2	0.55	II 2	
SKiiP 39ANB16V1	157	140	1.7	19.9	17.2	0.3	167	1.50	16.2	0.4	II 3	
SKiiP 28AHB16V1	118	105	1.7	14.4	13.3	0.4	118	1.60	10.8	0.55	II 2	
SKiiP 39AHB16V1	157	140	1.7	19.9	17.3	0.3	167	1.50	16.2	0.4	II 3	

For detailed case drawings please see page 38

# Modules - Bridge - SEMIPONT

Type	$V_{RRM}$ $V_{DRM}$	$I_D$ @ $T_C$	$T_C$	$I_{TSM}$ $I_{FSM}$ @ $T_{jmax}$	$V_{T(TO)}$ @ $T_{jmax}$	$r_T$ @ $T_{jmax}$	$R_{th(j-c)}$ cont. per chip	$T_j$	Case	Circuit
	V	A	°C	A	V	mΩ	K/W	°C		
<b>1 and 3 phase</b>										
SKB 52	400-1800	50	99	425	0.85	8	1.5	-40 ... +150	3	
SKB 60	400-1600	60	88	850	0.85	5	1	-40 ... +125	2	
SKB 72	400-1800	70	101	640	0.85	5	1.1	-40 ... +150	3	
SKBT 28	600-1400	28	89	280	1	16	1.8	-40 ... +125	1	
SKBT 40	800-1400	46	92	400	1	16	1	-40 ... +125	2	
SKBZ 28	400-1400	28	89	280	1	16	1.8	-40 ... +125	1	
SKBH 28	600-1400	28	89	280	1	16	1.8	-40 ... +125	1	
SKCH 28	400-1400	28	89	280	1	16	1.8	-40 ... +125	1	
SKCH 40	400-1600	40	92	400	1	16	1	-40 ... +125	2	
SKDT 60	400-1400	60	86	400	1	16	1	-40 ... +125	2	
SKDT 115	1200-1600	110	80	950	1.1	6	0.84	-40 ... +125	5	
SKDT 145	1200-1600	140	80	1250	0.9	5	0.6	-40 ... +125	5	
SKD 31	200-1600	31	100	320	0.85	12	2	-40 ... +125	1	
SKD 60	400-1600	60	102	850	0.85	5	1	-40 ... +125	2	
SKD 62	400-1800	60	110	425	0.85	8	1.5	-40 ... +150	3	
SKD 82	400-1800	80	110	640	0.85	5	1.1	-40 ... +150	3	
SKD 100	400-1600	100	93	1000	0.85	5	0.85	-40 ... +125	2	
SKD 110	800-1800	110	100	1000	0.85	4	0.9	-40 ... +150	4	
SKD 115	1200-1800	110	85	1150	0.8	7	1	-40 ... +150	5	
SKD 145	1200-1800	140	85	1700	0.8	4	0.8	-40 ... +150	5	
SKD 160	800-1800	205	100	1500	0.85	3	0.65	-40 ... +150	4	
SKD 210	900-1800	207	99	1600	0.85	3	0.5	-40 ... +150	4	
SKDH 100	800-1400	100	84	850	1	4.5	0.85	-40 ... +125	2	
SKDH 115	1200-1600	110	80	950	1.1	6	0.84	-40 ... +125	5	
SKDH 145	1200-1600	110	80	1250	0.9	5	0.63	-40 ... +125	5	

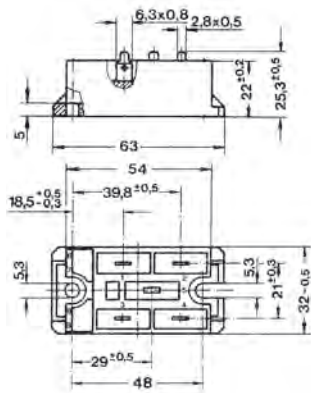
# Modules - Bridge - SEMIPONT

Type	$V_{RRM}$ $V_{DRM}$	$I_D$ @ $T_C$	$T_C$	$I_{TSM}$ $I_{FSM}$ @ $T_{jmax}$	$V_{T(TO)}$ @ $T_{jmax}$	$r_T$ @ $T_{jmax}$	$R_{th(j-c)}$ cont. per chip	$T_j$	Case	Circuit
	V	A	°C	A	V	mΩ	K/W	°C		
<b>3 phase with brake chopper</b>										
SKD 116/...-L100	1200-1600	110	80	950	0.8	7	0.3	-40 ... +125	6	
SKD 116/...-L75	1200-1600	110	85	1050	0.8	7	0.4	-40 ... +125	6	
SKD 146/...-L100	1200-1600	140	85	1250	0.8	4	0.3	-40 ... +125	6	
SKD 146/...-L75	1200-1600	140	85	1250	0.8	4	0.4	-40 ... +125	6	
SKDH 116/...-L100	1200-1600	110	80	950	1.1	6	0.85	-40 ... +125	6	
SKDH 116/...-L75	1200-1600	110	80	950	1.1	6	0.84	-40 ... +125	6	
SKDH 146/...-L100	1200-1600	140	80	1250	0.8	4	0.3	-40 ... +125	6	
SKDH 146/...-L75	1200-1600	140	80	1250	0.8	4	0.4	-40 ... +150	6	
SKDH 146/08-L200	800	140	80	1250	0.85	3	0.6	-40 ... +125	6	

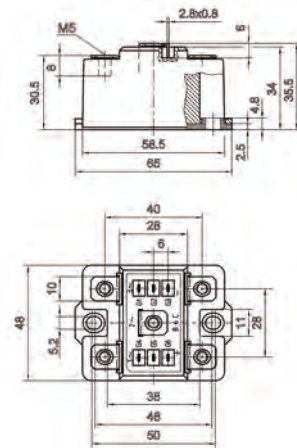
# Modules - Bridge - SEMIPONT

## Cases

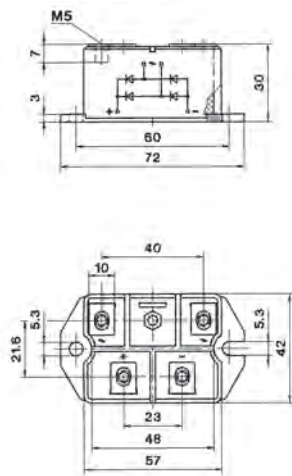
**SEMIPONT 1**



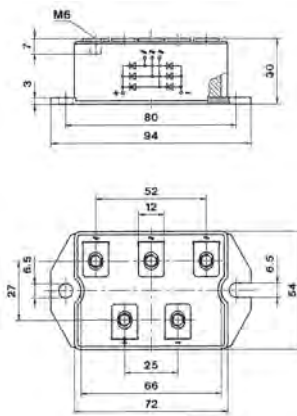
**SEMIPONT 2**



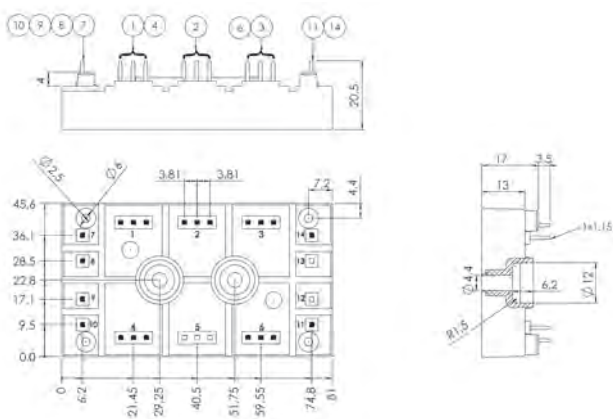
**SEMIPONT 3**



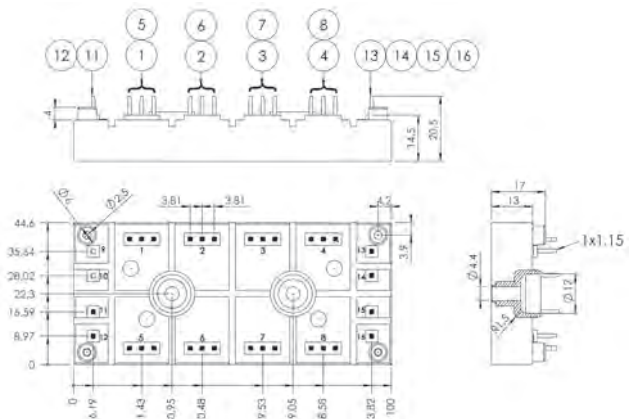
**SEMIPONT 4**



**SEMIPONT 5**



**SEMIPONT 6**



Dimensions in mm

# Modules - Bridge - SEMITOP

Type	$V_{RRM}$ $V_{DRM}$	$I_D$ @ $T_s$	$T_s$	$I_{TSM}$ $I_{FSM}$ @ $T_{jmax}$	$V_{T(TO)}$ @ $T_{jmax}$	$r_T$ @ $T_{jmax}$	$R_{th(j-s)}$ per chip	$T_j$	Case	Circuit
	V	A	°C	A	V	mΩ	K/W	°C		
<b>1 and 3 phase</b>										
SK 50 B 06 UF	600	46	80	400	0.8	11	0.45	-40 ... +150	2	
SK 50 B	800-1600	51	80	270	0.8	13	1.7	-40 ... +150	2	
SK 55 B 06 F	600	54	80	440	0.9	16	1.2	-40 ... +150	2	
SK 55 B 12 F	1200	57	80	550	1.2	22	0.9	-40 ... +150	2	
SK 70 B	800-1600	68	80	560	0.8	11	1.2	-40 ... +150	2	
SK 100 B	800-1600	100	80	890	0.83	3.9	1	-40 ... +150	2	
SK 40 DT	800-1600	42	80	280	1.1	20	1.7	-40 ... +125	3	
SK 70 DT	800-1600	68	80	380	1	10	1.2	-40 ... +125	3	
SK 55 D	800-1600	55	80	200	0.8	13	2.15	-40 ... +150	2	
SK 70 D	800-1600	70	80	270	0.8	13	1.7	-40 ... +150	2	
SK 80 D 12F	1200	80	80	550	1.2	22	0.9	-40 ... +150	3	
SK 95 D	800-1600	95	80	560	0.8	11	1.2	-40 ... +150	2	
SK 40 DH	800-1600	42	80	270	1.1	20	1.7	-40 ... +150	3	
SK 70 DH	800-1600	68	80	270	1	10	1.2	-40 ... +125	3	
SK 55 DGL 126	1200	55	80	370	0.8	13	2	-40 ... +150	3	
SK 74 DGL 063	600	74	80	370	0.8	13	1.7	-40 ... +150	3	
SK 95 DGL 126	1600	96	80	700	0.8	11	1.2	-40 ... +150	3	
SK 170 DHL 126	1200	170	70	1000	0.8	7	0.51	-40 ... +150	4	
SK 200 DHL 066	600	210	70	1250	0.8	4	0.52	-40 ... +150	4	

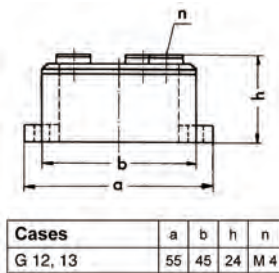
For detailed case drawings please see page 23

# Modules - Bridge - Bridge

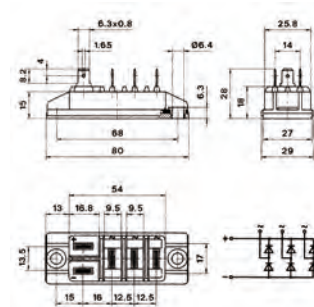
Type	$V_{RRM}$ $V_{DRM}$	$I_D$ @ $T_C$	$T_C$	$I_{FSM}$ @ $T_{jmax}$	$V_{T(TO)}$ @ $T_{jmax}$	$r_T$ @ $T_{jmax}$	$R_{th(j-s)}$ cont. per chip	$T_j$	Case	Circuit
	V	A	°C	A	V	mΩ	K/W	°C		
<b>1 and 3 phase</b>										
SKB 30	200-1600	30	94	320	0.85	12	3.2	-40 ... +150	G12	
SKD 30	200-1600	30	98	320	0.85	12	4.8	-40 ... +150	G13	
SKD 33	400-1800	33	110	240	0.8	18	2.5	-40 ... +150	G55	
SKD 51	400-1800	50	127	700	0.8	8.5	1.1	-40 ... +150	G51	
SKD 53	400-1800	53	100	270	0.8	13	1.9	-40 ... +150	G55	
SKD 83	400-1800	83	95	560	0.8	7.5	1.4	-40 ... +150	G55	

## Cases

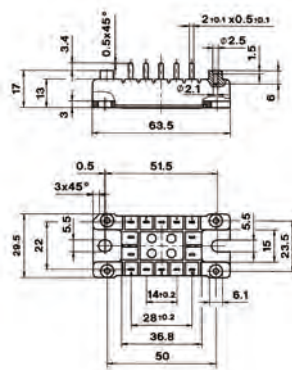
**G 12, G 13**



**G 51**



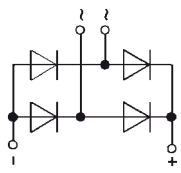
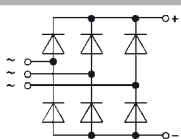
**G 55**



Dimensions in mm

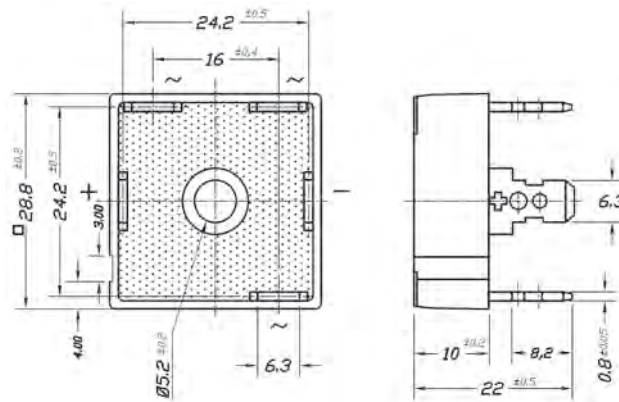


# Modules - Miniature Bridge - Fast-on

Type	$V_{RRM}$ $V_{DRM}$	$I_D$ @ $T_C$	$T_C$	$I_{FSM}$ @ $T_j = 25^\circ C$	$V_F$ @ $I_F$ $T_j = 25^\circ C$	$I_F$ @ $T_j = 25^\circ C$	$R_{th(j-s)}$ total	$T_j$	Case	Circuit
	V	A	$^\circ C$	A	V	A	K/W	$^\circ C$		
<b>Standard recovery - 1 phase</b>										
SKB 25	100-1600	17	75	370	2.2	150	2.15	-40 ... +150	G 10b	
<b>Standard recovery - 3 phase</b>										
SKD 25	200-1600	20	73	370	2.2	150	1.9	-40 ... +150	G 11b	

## Cases

### G 10b, G 11b



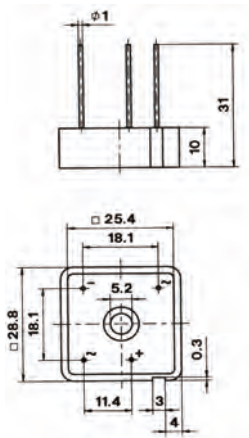
Dimensions in mm

# Modules - Miniature Bridge - Leaded

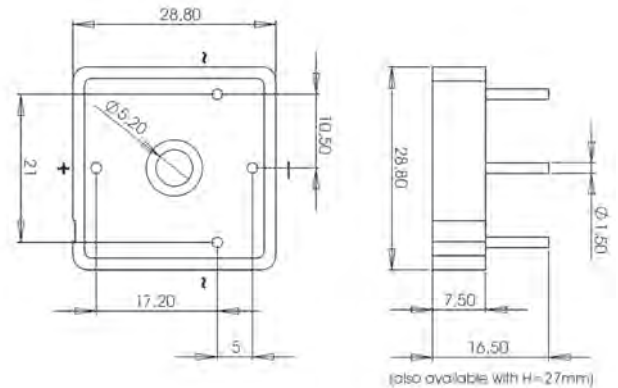
Type	$V_{RRM}$ $V_{DRM}$	$I_D$ @ $T_C$	$T_C$	$I_{FSM}$ @ $T_j=25^\circ C$	$V_F$ @ $I_F$ $T_j=25^\circ C$	$I_F$ @ $T_j=25^\circ C$	$R_{th(j-a)}$ total	$T_j$	Case	Circuit
	V	A	$^\circ C$	A	V	A	K/W	$^\circ C$		
<b>Standard recovery - 1 phase</b>										
SKB 26	200-1600	18	75	370	2.2	150	15	-40 ... +150	G 50a	
SKB 51L-W	200-1600	50	37	650	1.5	150	14	-40 ... +150	51L-W	
<b>Standard recovery - 3 phase</b>										
DBI 6	200-1600	9	90	180	1.2	10	22	-40 ... +150	DBI	
DBI 15	200-1600	15	75	250	1.7	50	21	-40 ... +150	DBI	
DBI 25	200-1600	25	32	370	1.05	12.5	21	-40 ... +150	DBI	

## Cases

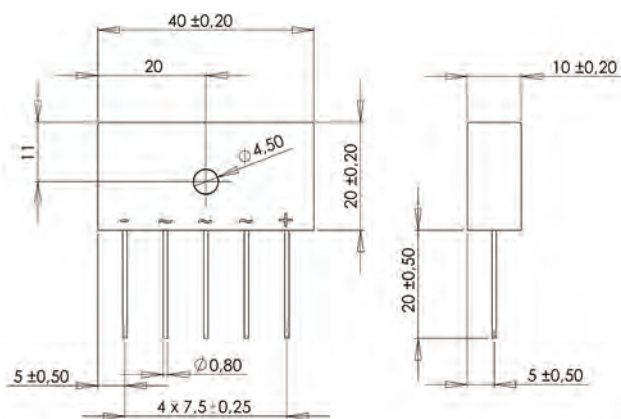
**G 50a**



**SKB 51L-W**



**DBI**



Dimensions in mm