

Rectifier Diodes

Type	V_{RRM} V_{RSM} V	I_{FRMS} A	I_{FAV} @ T_{case} sin. 180 A °C	I_{FSM} 10 ms 25 °C A	P_T 10 ms 25 °C A ² s	Case	
SK 1	1 000 ... 1 600	3	1,15 45 ¹⁾	60	18	E 33	
SK 3	1 000 ... 1 600	6,7	1,8 45 ¹⁾	180	162	E 34	
SKN 2,5	400 ... 1 600	5	2,5 45 ¹⁾	180	160	E 5	
SKN 5	200 ... 1 600	10	5 45 ¹⁾	190	180	E 6	
SKN 20 SKR 20	400 ... 1 600	40	20 125	375	700	E 9	
SKN 26 SKR 26 ²⁾	400 ... 1 600	40	20 125	375	700	E 8	
SKN 45 SKR 45	400 ... 1 600	80	45 125	700	2 500	E 12	
SKN 70 SKR 70	400 ... 1 600	150	70 125	1 150	6 600	E 12	
SKN 71 ³⁾ SKR 71 ³⁾	400 ... 1 600	150	70 125	1 150	6 600	E 11	
SKN 100 SKR 100	400 ... 1 800	200	100 125	1 750	15 000	E 13	
SKN 130 SKR 130 ²⁾	400 ... 1 800	260	130 125	2 500	31 000	E 14	
SKN 240 SKR 240 ²⁾	400 ... 1 800	500	240 125	6 000	180 000	E 15	
SKN 320 SKR 320	400 ... 1 600	700	320 125	9 000	400 000	E 16	
SKN 400	1 800 ... 3 000	700	400 100	9 000	400 000	E 17	
SKN 4000	200 ... 600	6 300	4 000 50	60 000	18 · 10 ⁶	E 35	
SKN 6000	200 ... 600	10 000	6 000 85	60 000	18 · 10 ⁶	E 35	

Avalanche Rectifier Diodes

Type	V_{BR} min.	I_{FRMS} A	I_{FAV} @ T_{case} sin. 180 A °C	I_{FSM} 10 ms 25 °C A	P_T 10 ms 25 °C A ² s	Case	
SKa 1	1 300, 1 700	3	1,15 45 ¹⁾	60	18	E 33	
SKa 3	1 300, 1 700	6,7	1,8 45 ¹⁾	180	162	E 34	
SKNa 2	1 300, 1 700	5	2,0 45 ¹⁾	180	160	E 5	
SKNa 4	1 300, 1 700	10	3,7 45 ¹⁾	190	180	E 6	
SKNa 20	1 300, 1 700	40	20 93	375	700	E 9	

¹⁾ T_{amb}

²⁾ Also available with UNF-thread



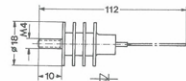
Rectifier Diodes

Cases E 5 / E 33 / E 34

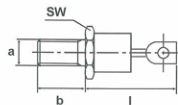


Cases	a	b	l	d
E 5	10	20	40	0,8
E 33	4,5	7	28	0,75
E 34	6	9	27	1,18

Case E 6

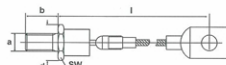


Cases E 7 / E 8 / E 10 / E 11 / E 31



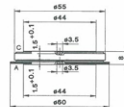
Cases	a	b	d	l	sw
E 7	M 5	11	2,7	23,5	11
E 8	M 6	11	2,7	21,5	11
E 10	M 6	11	4	24,5	17
E 11	M 8	11	3,8	23,5	17
E 31	M 12	18	8,4	47	24

Cases E 9 / E 12 ... E 17






Cases	a	b	l	d
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

Cases E 35



Dimensions in mm

Fast Rectifier Diodes

Type	V _{RM} V _{RSM}	I _{FRMS}	I _{FAV} @ T _{case} sin. 180	I _{FSM} 10 ms 25 °C	P _T 10 ms 25 °C	t _{rr} ²⁾ max. 25 °C	Case		
	V	A	A	A	A ² s	ns			
SKR 20 F ¹⁾	1 000 ... 1 200	30	20	85	150	110	80	E 39	
SKR 31 F ¹⁾	1 000 ... 1 200	47	31	85	320	510	100	E 40	
SKR 47 F ¹⁾	1 500 ... 1 700	74	47	85	500	1 250	120		
SKR 48 F ¹⁾	1 000 ... 1 200	72	48	85	500	1 250	80		
SKR 67 F ¹⁾	500 ... 600	105	67	85	650	2 100	60		
SKN 2 F 17 ⁴⁾ SKR 2 F 17 ⁴⁾	400 ... 1 000	41	26	85	450	1 000	150	E 7 ³⁾	
SKN 3 F 20 ⁴⁾ SKR 3 F 20 ⁴⁾	800 ... 1 200	41	26	85	375	700	250	E 10 ³⁾	
SKN 2 F 50 ⁴⁾ SKR 2 F 50 ⁴⁾	400 ... 1 000	100	50	105 50	1 100 800	6 000 3 200	200		
SKN 60 F SKR 60 F	1 200 ... 1 500	120	75	85	1 400	9 800	700		E 31 ³⁾
SKN 136 F SKR 136 F	800 ... 1 200	260	160	85	2 500	31 000	500		
SKN 141 F SKR 141 F	1 200 ... 1 700	260	168	85	2 500	31 000	800	E 14 ³⁾	
SKN 135 F SKR 135 F	800 ... 1 200	260	160	85	2 500	31 000	500		
SKN 140 F SKR 140 F	1 200 ... 1 500	260	168	85	2 500	31 000	800		

¹⁾ CAL (controlled axial lifetime) technology

²⁾ for test conditions refer to the individual data sheet

³⁾ Cases: please refer to page 9

⁴⁾ Also available with UNF-thread



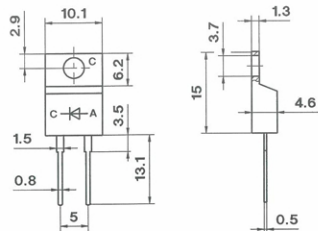
SKN
(Anode to stud)



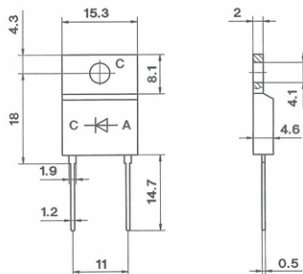
SKR
(Cathode to stud)

Fast Rectifier Diodes

Cases E 39
TO - 220 AC



Cases E 40
TO - 218



Dimensions in mm

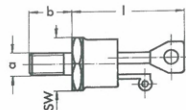
Thyristors

Type	V_{ORM} V_{RSM}	I_{RMS}	I_{TAV} @ T_{case}		I_{TSM}	T_{vj}	R_{thjc}	Case
	V	A	sin. 180 A	T_{case} °C	10 ms 25 °C A	max. °C	sin. 180 °C/W	
SKT 10	600 ... 1200	30	10	106	250	130	1,3	B 1
SKT 16 ¹⁾	400 ... 1800	40	16	103	370	130	0,9	B 2
SKT 24 ¹⁾	400 ... 1800	50	24	94	450	130	0,9	B 2
SKT 40	400 ... 1800	63	38	85	700	130	0,66	B 3
SKT 50 ¹⁾	600 ... 1800	78	45	85	1 050	130	0,60	B 3
SKT 55	400 ... 1800	110	55	92	1 300	130	0,47	B 5
SKT 80 ¹⁾	600 ... 1800	135	80	85	1 700	130	0,28	B 5
SKT 100 ¹⁾	400 ... 1800	175	100	85	2 000	130	0,28	B 5
SKT 130	400 ... 1600	220	130	85	3 500	130	0,18	B 6
SKT 160 ¹⁾	400 ... 1600	280	160	85	4 300	130	0,18	B 6
SKT 250	400 ... 1600	450	250	85	7 000	130	0,123	B 7
SKT 300 ¹⁾	400 ... 1600	550	350	85	11 000	130	0,096	B 7
SKT 240	400 ... 1800	600	240	92	5 000	125	0,072	B 8
SKT 340	400 ... 1800	700	340	82	5 700	125	0,072	B 8
SKT 491	400 ... 1800	1000	490	80	8 000	125	0,047	B 11
SKT 551	800 ... 1800	1200	550	85	9 000	125	0,047	B 11
SKT 600	800 ... 1800	1400	600	85	11 500	125	0,040	B 10
SKT 760	800 ... 1800	1600	760	80	15 000	125	0,040	B 10
SKT 1000	800 ... 2800	2300	1000	85	19 000	125	0,0225	B 14
SKT 1200	1200 ... 1800	2800	1200	85	30 000	125	0,0225	B 14
SKT 1400	2600 ... 3600	3000	1400	62	29 000	125	0,0185	B 19
SKT 1800	1200 ... 1600	4500	1800	85	53 000	125	0,0155	B 19
SKT 2000	2200 ... 2800	5000	2000	72	45 000	125	0,0110	B 20
SKT 2400	1200 ... 1800	5700	2400	75	55 000	125	0,0110	B 20

1) Also available with UNF- thread

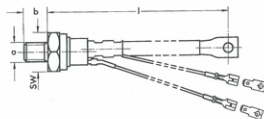
Thyristors

Cases B 1 ... B 3



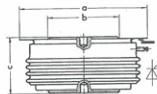
Cases	a	b	l	SW
B 1	M 5	11	20,3	11
B 2	M 6	11	30	14
B 3	M 8	11	33,5	17

Cases B 5 ... B 7



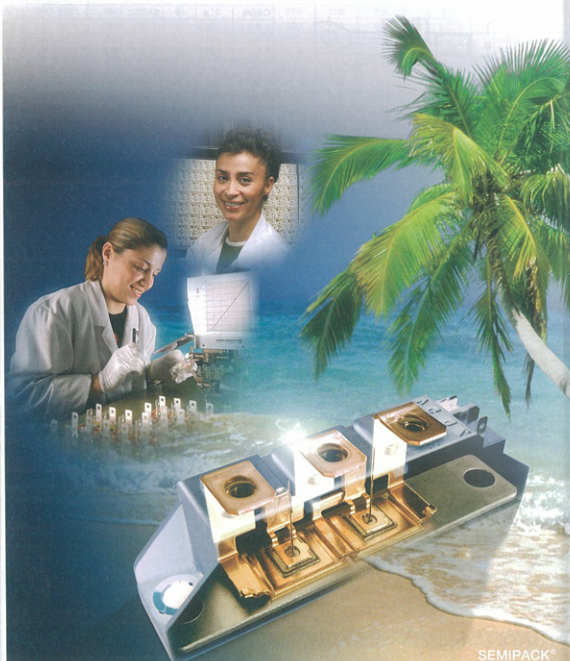
Cases	a	b	l	SW
B 5	M 12	18	160	24
B 6	M 16 x 1,5	20	190	32
B 7	M 24 x 1,5	20	230	41

Cases B 8 ... B 20



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

Dimensions in mm



SEMIPACK® Thyristor/Diode Modules

Type	Circuit	V _{ORM}	I _{TRMS}	I _{FAV} @ T _{case}	I _{TJFSM}	T _{vj}	R _{thjc}	SEMI- PACK	Case		
		V _{VRM}	I _{FRMS}	I _{FAV} sin. 180°	25 °C	max.	cont.				
▲ New type		V	A	A	A	°C	°C/W	size			
SKKD 15	⎓	600 ... 1600	28	15	82	320	125	2,0	0	A 3	
SKKD 26		1200 ... 1600	60	31	85	550	125	1,0	1	A 10	
SKKD 46		400 ... 1800	90	45	86	700	125	0,60	1		
SKKD 81		400 ... 2200	140	80	87	2 000	125	0,40	1		
SKKD 100		400 ... 1800	175	100	85	2 500	125	0,35	1		
SKKD 162		800 ... 2200	310	195	85	6 000	135	0,18	2	A 23	
SKKD 260		800 ... 2200	410	260	85	11 000	130	0,14	3	A 78 a	
SKKD 380		800 ... 2200	600	380	100	11 000	150	0,11	3	A 78 a	
SKKD 700		800 ... 2200	1100	700	100	25 000	150	0,062	5	A 75 a	
SKKE 15		400 ... 1600	28	15	82	320	125	2,0	0	A 4	
SKKE 81	400 ... 2200	140	80	87	2 000	125	0,40	1	A 12		
SKKE 162	800 ... 1800	310	195	85	6 000	135	0,18	2	A 24		
SKKE 380	1200 ... 1600	600	380	100	11 000	150	0,11	3	A 77 a		
SKKE 400	1200 ... 2400	825	525	85	12 000	150	0,090	4	A 42		
SKMD 100	→ D = K ←	400 ... 1800	175	100	85	2 500	125	0,35	1	A 33	
SKND 46	⎓	400 ... 1800	90	45	86	700	125	0,60	1	A 19	
SKND 81		400 ... 2200	140	80	87	2 000	125	0,40	1		
SKND 162 ²⁾	⎓	800 ... 1800	310	195	85	6 000	135	0,18	2	A 57	
SKKH 15	⎓	400 ... 1600	28	15	75	320	125	1,6	0	A 2	
SKKH 27		800 ... 1800	50	25	85	550	125	0,9	1	A 6, 47	
SKKH 42		800 ... 1800	75	40	85	1 000	125	0,65	1		
SKKH 57		800 ... 2200	95	55	80	1 500	125	0,57	1		
SKKH 72		800 ... 2200	125	70	85	1 600	125	0,35	1		
SKKH 92		800 ... 1800	150	95	85	2 000	125	0,28	1		
SKKH 106		800 ... 1800	180	106	85	2 250	130	0,28	1		
SKKH 122		800 ... 1800	195	128	85	3 600	125	0,2	2		A 22
SKKH 132		800 ... 1800	220	130	87	4 700	125	0,18	2		A 22
SKKH 162		800 ... 1800	250	160	83	5 400	125	0,17	2		A 22
SKKH 210		1200 ... 2200	350	220	88	8 500	130	0,14	3		A 76 a
SKKH 213		1200 ... 1800	370	230	85	8 500	130	0,11	3		A 56
SKKH 250		1200 ... 1800	420	250	85	9 000	130	0,14	3		A 76 a
SKKH 253		800 ... 1800	420	253	85	9 000	130	0,11	3		A 56
SKKH 330		800 ... 1800	510	330	78	9 000	130	0,11	3		A 76 a
▲ SKKH 430		1600 ... 2200	700	440	85	15 000	125	0,065	5		A 66 a
SKKH 500	800 ... 1800	920	540	85	17 000	130	0,062	5	A 66 a		
SKKL 92	→ D = D ←	400 ... 1800	150	95	85	2 000	125	0,30	1	A 59	
SKKT 15	⎓	400 ... 1600	28	15	75	320	125	1,6	0	A 1	
SKKT 19, 20, 20 B		800 ... 1600	40	18	85	320	125	1,2	1	1)	
SKKT 26, 27, 27 B		800 ... 1800	50	25	85	550	125	0,9	1		
SKKT 41, 42, 42 B		800 ... 2200	75	40	85	1 000	125	0,65	1		
SKKT 56, 57, 57 B		800 ... 2200	95	55	80	1 500	125	0,57	1		
SKKT 71, 72, 72 B		800 ... 2200	125	70	85	1 600	125	0,35	1		
SKKT 91, 92, 92 B		800 ... 1800	150	95	85	2 000	125	0,28	1		
SKKT 105, 106, 106B		800 ... 1800	180	106	85	2 250	130	0,28	1		

• pressure contact

¹⁾ A 5, A 46, A 47

²⁾ available on request



SEMI-PONT® Bridge Rectifiers

Miniature bridge rectifiers 1-phase

Type	V_{RSM} V_{RRM} V	I_D $I_{T_{amb} = 45^\circ C}$ A	I_{OCL} A	I_{FSM} A	P_t A^2/s	SEMI-PONT	Case	Circuit
SKB 2	200 ... 1200	1,7	1,4	58	17	-	G 4	<p>B 2 U</p>
SKB B...C 1000 L 5 B	120 ... 1200	1,2	1	58	17	-	G 2	
SKB B...C 1500 L 5 B	120 ... 1200	1,5	1,3	80	32	-	G 2	
MSK B 250/220-1,5	800	2	1,6	58	17	-	G 7	
SKB B...-4	400 ... 1200	5	4	180	160	-	G 8	
Avalanche Types		V_{BR}						
SKBa B 500 C 1000 L 5 B	1300	1,2	1	58	17	-	G 2	<p>B 2 U</p>
SKBa B 500 C 1500	1300	1,5	1,3	80	32	-	G 2	
MSKa B 500/445-1,5	1300	2	1,6	58	17	-	G 7	
MSKa B 660/585-1,5	1700	2	1,6	58	17	-	G 7	
SKBa B 500/445-4	1300	5	4	180	160	-	G 8	

Diode power bridge rectifiers 1-phase and 3-phase

Type	V_{RSM} V_{RRM} V	I_D @ T_{case} A	I_{FSM} 10 ms, 25 °C A	P_t A^2/s	SEMI-PONT	Case	Circuit	
▲ New type								
SKB 15	200 ... 1600	15	117	370	680	-	G 9	<p>B 2 U</p>
SKB 25	100 ... 1600	15	85	370	680	-	G 10A	
SKB 26	200 ... 1600	18	75	370	680	-	G 50	
SKB 30	200 ... 1600	33	85	370	680	-	G 12	
SKB 50	200 ... 1600	40	85	750	2 800	-	G 14	
SKB 52	400 ... 1800	50	99	500	1 250	3	G 35	
SKB 60	400 ... 1600	67	85	1 000	5 000	2	G 17A	
SKB 72	400 ... 1800	70	101	750	2 800	3	G 35	
SKD 25	200 ... 1600	17,5	85	370	680	-	G 11A	
SKD 30	200 ... 1600	35	85	370	680	-	G 13	
SKD 31	200 ... 1600	44	85	370	685	1	G 26	
SKD 33	400 ... 1800	36	106 ²⁾	300	450	-	G 55	
SKD 50	200 ... 1600	55	85	750	2 800	-	G 15	
SKD 51	400 ... 1800	50	127	775	3 000	-	G 51	
SKD 53	400 ... 1800	53	100 ²⁾	370	685	-	G 55	
SKD 60	400 ... 1600	92	85	1 000	5 000	2	G 18A	
SKD 62	400 ... 1800	60	110	500	1 250	3	G 36	
SKD 82	400 ... 1800	80	110	750	2 800	3	G 36	
SKD 83	400 ... 1800	83	95 ²⁾	700	2 450	-	G 55	
SKD 100	400 ... 1600	110	85	1 150	6 600	2	G 18A	
SKD 110	400 ... 1800	110	100	1 200	7 200	4	G 37	
SKD 115	1200 ... 1800	110	80	1 150 ¹⁾	6 600 ¹⁾	5	G 57	
SKD 145	1200 ... 1800	140	80	1 700 ¹⁾	14 450 ¹⁾	5	G 57	
SKD 160	400 ... 1800	160	100	1 800	16 200	4	G 37	
▲ SKD 230³⁾	800 ... 1800	230	110	2 200	24 200	7	G 63	

¹⁾ $T_{amb} = 125^\circ C$ ²⁾ T_{max} ³⁾ target data

Controllable power bridge rectifiers 1-phase and 3-phase

Type	V_{RSM} V_{RRM} V	$I_D @ T_{case}$		I_{FSM}, I_{TSM} 10 ms, 25 °C A	I^2t A ² s	SEMI-PONT	Case	Circuit
		A	°C					
▲ New type								
SKB 33	200 ... 1 200	24	85	370	680	-	G 16	
SKCH 28	400 ... 1 400	30	85	320	510	1	G 25	
SKCH 40	400 ... 1 600	46	85	470	1 100	2	G 19A	
SKBH 28	600 ... 1 400	30	85	320	510	1	G 23	
SKBZ 28	400 ... 1 400	30	85	320	510	1	G 24	
SKBT 28	600 ... 1 400	30	85	320	510	1	G 22	
SKBT 40	800 ... 1 400	46	85	470	1 100	2	G 20A	
SKDH 100	800 ... 1 400	98	85	1 000	5 000	2	G 53A	
SKDH 115	1 200 ... 1 600	110	80	1 050 ¹⁾	5 500 ¹⁾	5	G 61	
SKDH 145	1 200 ... 1 600	140	80	1 250 ¹⁾	7 800 ¹⁾	5	G 61	
▲ SKDH 230 ³⁾	800 ... 1 800	230	85	2 200	24 200	7	G 64	
SKDT 60	400 ... 1 400	61	85	470	1 100	2	G 21A	
SKDT 100	800 ... 1 400	98	85	1 000	5 000	2	G 21A	
SKDT 115	1 200 ... 1 600	110	80	1 050 ¹⁾	5 500 ¹⁾	5	G 58	
SKDT 145	1 200 ... 1 600	140	80	1 250 ¹⁾	7 800 ¹⁾	5	G 58	
▲ SKDT 230 ³⁾	800 ... 1 800	230	80	1 450	11 250	7	G 65	

¹⁾ $T_d = 125\text{ °C}$ ²⁾ T_{max} ³⁾ target data

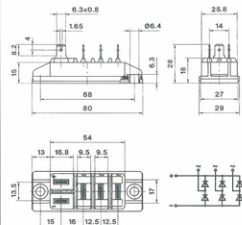
Bridge rectifier with brake chopper 3-phase

Type	V_{RSM} V_{RRM} V	$I_D @ T_{case}$		I_{FSM}, I_{TSM} 10 ms, 125 °C A	I^2t A ² s	I_C IGBT	I_F FWD	SEMI-PONT	Case	Circuit
		A	°C							
SKD 116/- L75	1200...1600	110	80	1 050	5 500	75	70	6	G 60	
SKD 116/- L100	1200...1600	110	80	1 050	5 500	100	90	6	G 60	
SKD 146/- L75	1200...1600	140	80	1 250	7 800	75	70	6	G 60	
SKD 146/- L100	1200...1600	140	80	1 250	7 800	100	90	6	G 60	
SKDH 116/- L75	1200...1600	110	80	1 050	5 500	75	70	6	G 59	
SKDH 116/- L100	1200...1600	110	80	1 050	5 500	100	90	6	G 59	
SKDH 146/- L75	1200...1600	140	80	1 250	7 800	75	70	6	G 59	
SKDH 146/- L100	1200...1600	140	80	1 250	7 800	100	90	6	G 59	

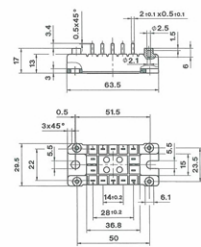
AC-Controller (W3C)

Type	V_{RSM} V_{RRM} V	$I_D @ T_{case}$		I_{FSM}, I_{TSM} 10 ms, 125 °C A	I^2t A ² s	I_C IGBT	I_F FWD	SEMI-PONT	Case	Circuit
		A	°C							
▲ New type										
SKUT 85	1200...1600	85	85	1 050	5 500	-	-	5	G 62	
SKUT 115	1200...1600	105	85	1 205	7 800	-	-	5	G 62	
▲ SKUT 230	800...1800	230	85	2 200	24 200	-	-	7	G 66	

Case G 51

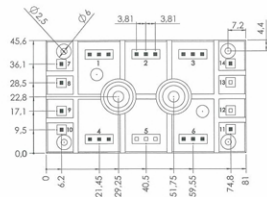
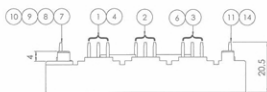


Case G 55

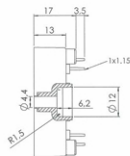


Dimensions in mm

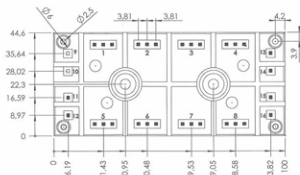
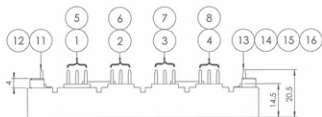
Case G 57, G 58, G 61, G 62



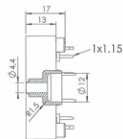
SEMIPTON® 5



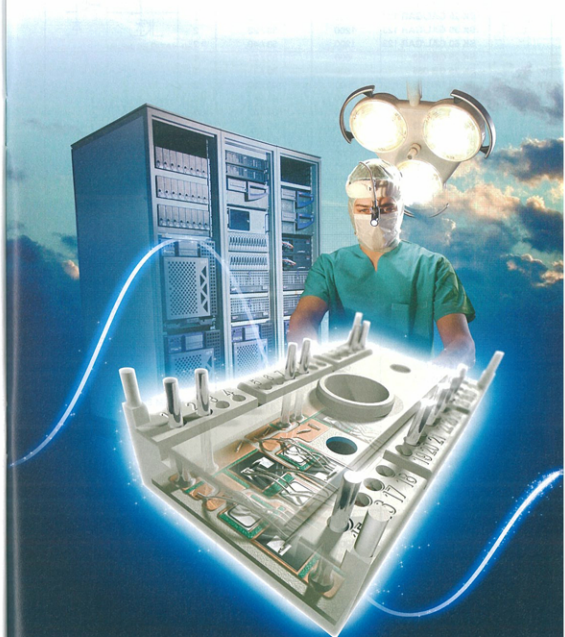
Case G 59, G 60



SEMIPTON® 6



Dimensions in mm



Type	Electrical characteristics		SEMI-TOP	Circuit	
	V_{CES} V	$I_C @ T_n = 25 / 80 ^\circ C$ A			
▲ New Type					
IGBT	SK 25 GAL/GAR 063	600	30 / 21	1	
	SK 45 GAL/GAR 063	600	45 / 30	2	
▲	SK 70 GAL/GAR 063	600	81 / 57	2	
	SK 20 GAL/GAR 123	1200	23 / 15	2	
	SK 30 GAL/GAR 123	1200	33 / 22	2	
	SK 60 GAL/GAR 123	1200	58 / 40	2	
	SK 25 GB 063	600	30 / 21	1	
	SK 25 GB 065	600	30 / 21	1	
	SK 45 GB 063	600	45 / 30	2	
	SK 80 GB 063	600	81 / 57	3	
▲	SK 80 GB 063 T	600	81 / 57	3	
	SK 20 GB 123	1200	23 / 15	2	
	SK 30 GB 123	1200	33 / 22	2	
▲	SK 40 GB 123	1200	40 / 27	2	
	SK 60 GB 123	1200	58 / 40	3	
	SK 15 GH 063	600	20 / 14	2	
	SK 25 GH 063	600	30 / 21	2	
	SK 45 GH 063	600	45 / 30	3	
	SK 10 GH 123	1200	16 / 11	2	
	SK 20 GH 123	1200	23 / 15	2	
	SK 30 GH 123	1200	33 / 22	3	
▲	SK 10 GHR 123 II-A	1200	16 / 11	3	
▲	SK 9 GD 063 ⁴⁾	600	11 / 8	2	
▲	SK 14 GD 063 ⁴⁾	600	18 / 13	2	
▲	SK 16 GD 063 ⁴⁾	600	20 / 14	2	
▲	SK 20 GD 063 ⁴⁾	600	24 / 17	2	
▲	SK 8 GD 063 ⁴⁾	600	11 / 8	3	
▲	SK 13 GD 063	600	18 / 13	3	
▲	SK 13 GD 065 IT	600	18 / 13	3	
▲	SK 15 GD 063	600	20 / 14	3	
	SK 25 GD 063	600	30 / 21	3	
	SK 45 GD 063	600	45 / 30	3	
▲	SK 8 GD 126 ⁴⁾	1200	11 / 8	2	
▲	SK 11 GD 123 ⁴⁾	1200	15 / 11	2	
▲	SK 15 GD 126 ⁴⁾	1200	23 / 15	2	
	SK 10 GD 123	1200	16 / 11	3	
	SK 20 GD 123	1200	23 / 15	3	
	SK 30 GD 123	1200	33 / 22	3	

1) $I_{TAV} @ T_n = 85 ^\circ C$ 2) $I_D @ T_n = 80 ^\circ C$

3) Fast rectifier bridge with CAL diodes

4) Available on request

5) With Schottky diodes

Type	Electrical characteristics		SEMI-TOP	Circuit	
	V_{CES} V	$I_C @ T_n = 25 / 80 ^\circ C$ A			
▲ New Type					
IGBT	SK 80 GM 063	600	81 / 57	2	
	SK 60 GM 123	1200	60 / 40	2	
▲	SK 25 DGAH 063 ⁴⁾	600	30 / 21	3	
▲	SK 8 BGDL 063 ⁴⁾	600	11 / 8	3	
▲	SK 10 BGDL 063 ⁴⁾	600	18 / 13	3	
▲	SK 15 BGDL 063 ⁴⁾	600	20 / 14	3	
▲	SK 20 BGDL 063 ⁴⁾	600	24 / 17	3	
▲	SK 25 BGDL 063 ⁴⁾	600	30 / 21	3	
	SK 8 DGD L 063 ⁴⁾	600	11 / 8	3	
▲	SK 10 DGD L 063 ⁴⁾	600	18 / 13	3	
▲	SK 15 DGD L 063 ⁴⁾	600	20 / 14	3	
▲	SK 20 DGD L 063 ⁴⁾	600	24 / 17	3	
▲	SK 25 DGD L 063 ⁴⁾	600	30 / 21	3	
		V_{DS} V	$I_D @ T_n = 25 / 80 ^\circ C$ A		
MOSFET	▲ SK 115 MB 075	75	100 / 70	2	
	SK 300 MB 075	75	290 / 190	3	
	▲ SK 115 MB 10	100	80 / 60	2	
	SK 260 MB 10	100	230 / 170	3	
	SK 85 MH 10	100	80 / 60	2	
▲	SK 115 MAA 10	100	90 / 75	2	
▲	SK 260 MAR 10	100	230 / 170	3	

1) $I_{TAV} @ T_n = 85 ^\circ C$ 2) $I_D @ T_n = 80 ^\circ C$

3) Fast rectifier bridge with CAL diodes

4) Available on request

5) With Schottky diodes

Type	Electrical characteristics		SEMI-TOP	Circuit
	V_{DS} V	$I_D @ T_n = 25 / 80 ^\circ C$ A		
MOSFET				
▲ New Type				
▲ SK 70 MD 075 ⁴⁾	75	100 / 70	2	
▲ SK 60 MD 10 ⁴⁾	100	80 / 60	2	
▲ SK 115 MD 10	100	80 / 60	3	
	V_{RMS} kV	$I_{RMS} @ T_n = 85 ^\circ C$ A		
Thyristor				
SK 60 KH 12 F	1,2	60 ¹⁾	2	
SK 60 KL 12 F	1,2	60 ¹⁾	2	
SK 25 KQ	0,8 / 1,2 / 1,6	29	1	
SK 45 KQ	0,8 / 1,2 / 1,6	47	1	
SK 70 KQ	0,8 / 1,2 / 1,6	72	1	
SK 100 KQ	0,8 / 1,2 / 1,6	101	2	
SK 120 KQ	0,8 / 1,2 / 1,6	134	2	
SK 25 UT	0,8 / 1,2 / 1,6	29	3	
SK 45 UT	0,8 / 1,2 / 1,6	47	3	
▲ SK 25 UH	0,8 / 1,2 / 1,6	29	2	
SK 35 NT ¹⁾	0,8 / 1,2 / 1,6	33 ¹⁾	1	
▲ SK 20 NHMH 08	0,8	20	2	
▲ SK 20 NHMH 10	1	20	2	
▲ SK 25 WT	0,8 / 1,2 / 1,6	29	2	
▲ SK 45 WT	0,8 / 1,2 / 1,6	47	2	
▲ SK 40 DH	0,8 / 1,2 / 1,6	40	3	
▲ SK 70 DH	0,8 / 1,2 / 1,6	68	3	

¹⁾ $I_{TAV} @ T_n = 85 ^\circ C$ ²⁾ $I_D @ T_n = 80 ^\circ C$ ³⁾ Fast rectifier bridge with CAL diodes⁴⁾ Available on request⁵⁾ With Schottky diodes

Type	Electrical characteristics		SEMI-TOP	Circuit
	V_{RMS} kV	$I_D @ T_n = 80 ^\circ C$ A		
Bridge Rectifier				
▲ New Type				
SK 50 B	0,8 / 1,2 / 1,6	51	2	
SK 70 B	0,8 / 1,2 / 1,6	68	2	
SK 55 B 06 F ³⁾	0,6	54	2	
SK 55 B 12 F	1,2	57	2	
SK 70 D	0,8 / 1,2 / 1,6	70	2	
SK 95 D	0,8 / 1,2 / 1,6	95	2	
SK 35 D 12 F ³⁾	1,2	33	2	
▲ SK 80 D 12 F ³⁾	1,2	60	3	
SK 40 DT	0,8 / 1,2 / 1,6	42	3	
SK 70 DT	0,8 / 1,2 / 1,6	68	3	
	V_{CES} V	$I_C @ T_n = 25 / 80 ^\circ C$ A		
Special Circuit topologies				
SK 13 BGB 123 F	1200	33 / 22	3	
▲ SK 70MND 10 S	0,1	60 / 50	2	
▲ SK 74 DGL 063 ⁴⁾	600	30 / 30	3	

¹⁾ $I_{TAV} @ T_n = 85 ^\circ C$ ²⁾ $I_D @ T_n = 80 ^\circ C$ ³⁾ Fast rectifier bridge with CAL diodes⁴⁾ Available on request⁵⁾ With Schottky diodes

SEMTRANS™ IGBT Modules

Type	V _{CEs}	I _c ¹⁾ @ T _{case}	V _{CEsat} @25°C	E @125°C	R _{th(j-c)} ¹⁾	Case	Circuit
▲ New type * Not for new design	min. V	A °C	typ. V	typ. mJ	max. K/W	SEMI- TRANS	

600 V Superfast NPT-IGBT

SKM 75 GAL 063 D	600	100 25	2,1	5,5	0,35	2	
SKM 145 GAL 063 DN	600	200 25	2,1	14	0,18	2 N	
SKM 195 GAL 063 DN	600	250 25	2,1	19	0,13	2 N	
SKM 300 GAL 063 D	600	400 25	2,1	27	0,09	3	
SKM 75 GAR 063 D	600	100 25	2,1	5,5	0,35	2	
SKM 195 GAR 063 DN	600	250 25	2,1	19	0,13	2 N	
SKM 300 GAR 063 D	600	400 25	2,1	27	0,09	3	
SKM 50 GB 063 D	600	70 25	2,1	4,3	0,5	2	
SKM 75 GB 063 D	600	100 25	2,1	5,5	0,35	2	
SKM 100 GB 063 D	600	130 25	2,1	7	0,27	2	
SKM 145 GB 063 DN	600	200 25	2,1	14	0,18	2 N	
SKM 150 GB 063 D	600	200 25	2,1	14	0,18	3	
SKM 195 GB 063 DN	600	250 25	2,1	19	0,13	2 N	
SKM 200 GB 063 D	600	260 25	2,1	18,5	0,14	3	
SKM 300 GB 063 D	600	400 25	2,1	27	0,09	3	

1200 V Standard-IGBT

SKM 300 GA 123 D	1200	300 25	2,5	48	0,075	4	
SKM 400 GA 123 D	1200	400 25	2,5	78	0,045	4	
SKM 500 GA 123 D	1200	500 25	2,5	98	0,041	4	
SKM 500 GA 123 DS	1200	500 25	2,5	98	0,041	4	
SKM 50 GAL 123 D	1200	50 25	2,5	11,5	0,4	2	
SKM 75 GAL 123 D	1200	75 25	2,5	13	0,27	2	
SKM 100 GAL 123 D	1200	100 25	2,5	18	0,18	2	
SKM 145 GAL 123 D	1200	145 25	2,5	28	0,15	2	
SKM 150 GAL 123 D	1200	150 25	2,5	24	0,15	3	
SKM 200 GAL 123 D	1200	200 25	2,5	41	0,09	3	
SKM 300 GAL 123 D	1200	300 25	2,5	54	0,075	3	
SKM 75 GAR 123 D	1200	75 25	2,5	13	0,27	2	
SKM 100 GAR 123 D	1200	100 25	2,5	18	0,18	2	
SKM 145 GAR 123 D	1200	145 25	2,5	28	0,15	2	
SKM 150 GAR 123 D	1200	150 25	2,5	24	0,15	3	
SKM 200 GAR 123 D	1200	200 25	2,5	41	0,09	3	
SKM 300 GAR 123 D	1200	300 25	2,5	54	0,075	3	
SKM 50 GB 123 D	1200	50 25	2,5	11,5	0,4	2	
SKM 75 GB 123 D	1200	75 25	2,5	13	0,27	2	
SKM 100 GB 123 D	1200	100 25	2,5	18	0,18	2	
SKM 145 GB 123 D	1200	145 25	2,5	28	0,15	2	
SKM 150 GB 123 D	1200	150 25	2,5	24	0,15	3	
SKM 200 GB 123 D	1200	200 25	2,5	41	0,09	3	
SKM 300 GB 123 D	1200	300 25	2,5	54	0,075	3	
SKM 400 GB 123 D	1200	400 25	2,5	78	0,05	3	

¹⁾ All data apply to one single IGBT element

SEMTRANS™ IGBT Modules

Type	V _{CEs}	I _c ¹⁾ @ T _{case}	V _{CEsat} @25°C	E @125°C	R _{th(j-c)} ¹⁾	Case	Circuit
▲ New type * Not for new design	min. V	A °C	typ. V	typ. mJ	max. K/W	SEMI- TRANS	

1200 V Standard-IGBT (continued)

* SKM 200 GBD 123 D1S	1200	200 25	2,5	41	0,09	3	2)
SKM 22 GD 123 D	1200	22 25	2,5	3,4	0,86	6	
SKM 40 GD 123 D	1200	40 25	2,5	6,1	0,56	6	
SKM 75 GD 123 D	1200	75 25	2,5	13	0,32	6	
SKM 75 GD 123 DL	1200	75 25	2,5	13	0,32	6	
SKM 40 GDL 123 D	1200	40 25	2,5	6,1	0,56	7	
SKM 75 GDL 123 D	1200	75 25	2,5	13	0,32	7	
SKD 40 GAL 123 D	1200	40 25	2,5	6,1	0,6	7D	
SKD 75 GAL 123 D	1200	75 25	2,5	13	0,32	7D	
SKD 100 GAL 123 D	1200	100 25	2,5	18	0,18	7D	

1200 V Low Loss-IGBT

SKM 400 GA 124 D	1200	600 25	2,1	78	0,045	4	
SKM 500 GA 124 D	1200	700 25	2,1	96	0,041	4	
SKM 600 GA 124 D	1200	700 25	2,0	118	0,03	4	
SKM 145 GAL 124 DN	1200	190 25	2,1	27	0,16	2NI	
SKM 195 GAL 124 DN	1200	260 25	2,1	40	0,12	2NI	
SKM 400 GAL 124 D	1200	570 25	2,1	78	0,05	3	
SKM 400 GAR 124 D	1200	570 25	2,1	78	0,05	3	
SKM 75 GB 124 D	1200	100 25	2,1	14	0,27	2	
SKM 100 GB 124 D	1200	150 25	2,1	20	0,18	2	
SKM 145 GB 124 D	1200	145 70	2,1	27	0,15	2	
SKM 145 GB 124 DN	1200	190 25	2,1	27	0,15	2N	
SKM 150 GB 124 D	1200	190 25	2,1	25	0,15	3	
SKM 195 GB 124 DN	1200	260 25	2,1	49	0,12	2N	
SKM 200 GB 124 D	1200	290 25	2,1	40	0,09	3	
SKM 300 GB 124 D	1200	380 25	2,1	57	0,075	3	
SKM 400 GB 124 D	1200	570 25	2,1	78	0,05	3	
SKM 40 GD 124 D	1200	50 25	2,1	6,6	0,56	6	
SKM 75 GD 124 D	1200	90 25	2,1	14	0,32	6	

¹⁾ All data apply to one single IGBT element

²⁾ Special with series diodes for resonant current source inverters (CSI)

SEMITRANS™ IGBT Modules

Type	V _{CES}	I _C ⁽¹⁾ @ T _{case}	V _{CEsat} @ 25°C	E @ 125°C	R _{D(jc)} ⁽¹⁾ max. K/W	Case	Circuit
▲ New type * Not for new design	min. V	A	typ. V	typ. mJ		SEMI- TRANS	

1200 V Ultrafast-IGBT

▲ SKM 600 GA 125 D	1200	580 25	3,3	52	0,041	4	
SKM 200 GAL 125 D	1200	200 25	3,3	22	0,09	3	
SKM 400 GAL 125 D	1200	400 25	3,3	35	0,05	3	
SKM 200 GAR 125 D	1200	200 25	3,3	22	0,09	3	
SKM 400 GAR 125 D	1200	400 25	3,3	35	0,05	3	
SKM 100 GB 125 DN	1200	100 25	3,3	12,5	0,18	2Ni	
SKM 200 GB 125 D	1200	200 25	3,3	22	0,09	3	
SKM 300 GB 125 D	1200	300 25	3,3	27	0,075	3	
SKM 400 GB 125 D	1200	400 25	3,3	35	0,05	3	

1200 V Trench-IGBT

SKM 800 GA 126 D	1200	880 25	1,7	160	0,042	4	
SKM 195 GB 126 DN	1200	220 25	1,7	46	0,16	2Ni	
SKM 200 GB 126 D	1200	240 25	1,7	46	0,16	3	
SKM 300 GB 126 D	1200	310 25	1,7	50	0,12	3	
SKM 400 GB 126 D	1200	490 25	1,7	69	0,085	3	
SKM 600 GB 126 D	1200	640 25	1,7	100	0,065	3	

1200 V Soft-Punch-Through IGBT

SKM 400 GA 128 D	1200	530 25	2,0	63	0,055	4	
SKM 500 GA 128 D	1200	660 25	2,0	84	0,047	4	
▲ SKM 145 GAL 128 DN	1200	175 25	2,0	21	0,165	2Ni	
▲ SKM 300 GAL 128 D	1200	345 25	2,0	42	0,085	3	
SKM 75 GB 128 DN	1200	95 25	2,0	10,5	0,3	2Ni	
SKM 100 GB 128 DN	1200	135 25	2,0	14	0,21	2Ni	
SKM 145 GB 128 DN	1200	175 25	2,0	21	0,165	2Ni	
▲ SKM 150 GB 128 D	1200	180 25	2,0	21	0,165	3	
SKM 200 GB 128 D	1200	285 25	2,0	32	0,095	3	
SKM 300 GB 128 D	1200	345 25	2,0	42	0,085	3	
SKM 400 GB 128 D	1200	520 25	2,0	63	0,055	3	

⁽¹⁾ All data apply to one single IGBT element

SEMITRANS™ IGBT Modules

Type	V _{CES}	I _C ⁽¹⁾ @ T _{case}	V _{CEsat} @ 25°C	E @ 125°C	R _{D(jc)} ⁽¹⁾ max. K/W	Case	Circuit
▲ New type * Not for new design	min. V	A	typ. V	typ. mJ		SEMI- TRANS	

1700 V Standard-IGBT

SKM 400 GA 173 D	1700	440 25	3,4	280	0,05	4	
SKM 400 GA 173 DIS	1700	440 25	3,2	280	0,05	4	
SKM 200 GAL 173 D	1700	220 25	3,4	140	0,1	3	
SKM 200 GAR 173 D	1700	220 25	3,4	140	0,1	3	
SKM 75 GB 173 D	1700	75 25	3,4	31	0,25	2	
SKM 100 GB 173 D	1700	110 25	3,4	56	0,2	2	
SKM 150 GB 173 D	1700	150 25	3,4	92	0,125	3	
SKM 200 GB 173 D	1700	220 25	3,4	140	0,1	3	
SKM 200 GB 173 D1 ⁽³⁾	1700	220 25	3,4	140	0,1	3	

1700 V Low Loss-IGBT

SKM 500 GA 174 D	1700	600 25	2,8	510	0,041	4	
SKM 145 GAL 174 DN	1700	160 25	2,8	115	0,16	2Ni	
SKM 145 GB 174 DN	1700	160 25	2,8	115	0,16	2Ni	
SKM 200 GB 174 D	1700	250 25	2,8	190	0,1	3	
SKM 300 GB 174 D	1700	320 25	2,8	220	0,07	3	

1700 V Trench-IGBT

SKM 800 GA 176 D	1700	890 25	2,0	620	0,035	4	
SKM 75 GB 176 DN	1700	80 25	2,0	57	0,3	2Ni	
SKM 100 GB 176 DN	1700	130 25	2,0	77	0,2	2Ni	
SKM 200 GB 176 D	1700	260 25	2,0	155	0,12	3	
SKM 400 GB 176 D	1700	440 25	2,0	310	0,065	3	

⁽¹⁾ All data apply to one single IGBT element⁽³⁾ Stronger inverse Diode