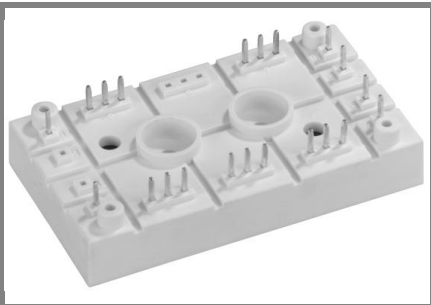




SEMIPONT[®] 5

Bridge Rectifiers

SKD 145

Target Data

Features

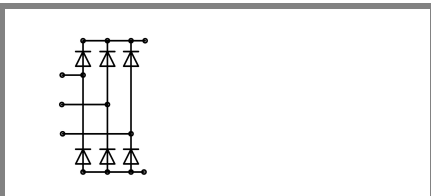
- Compact design
- SKiiP technology: thermal pressure contact, no base plate and no hard mould
- Two screws mounting
- Heat transfer and isolation through direct copper board (low R_{th})
- Low resistance in steady-state and high reliability
- High surge currents
- Up to 1800 V
- UL recognized, file no. E 63 532

Typical Applications

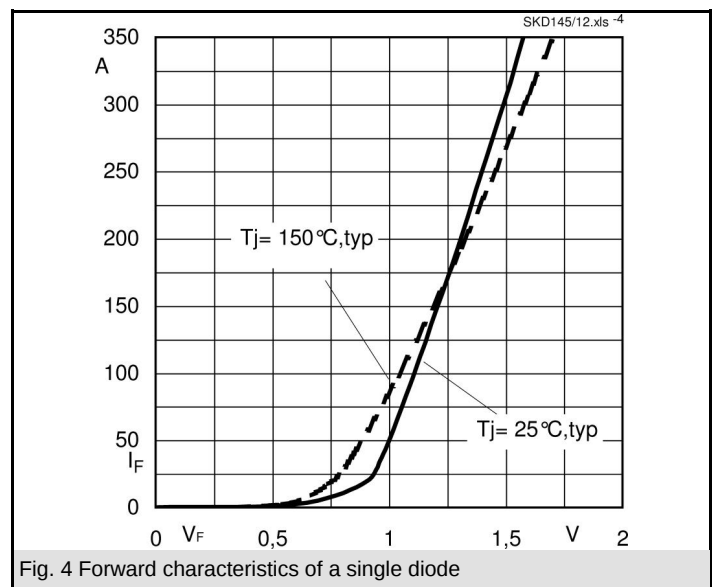
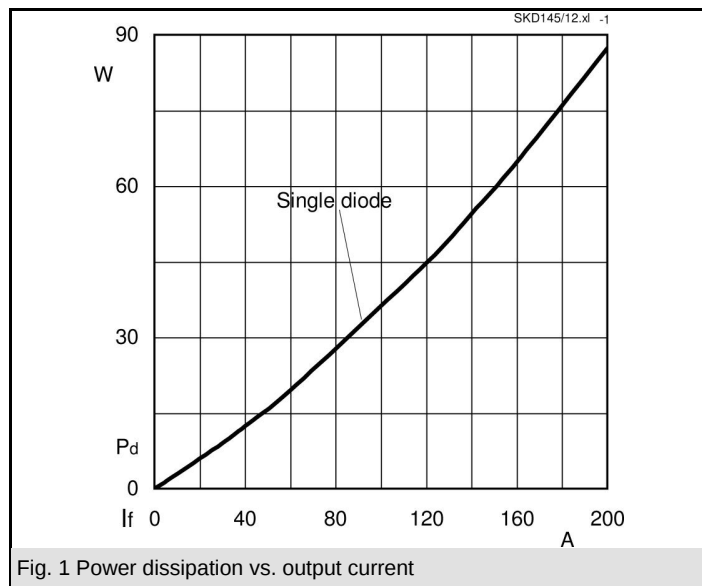
- Three phase rectifiers for power supplies
- Input rectifiers for variable frequency drives
- Rectifiers for DC motor field supplies
- Battery charger rectifiers

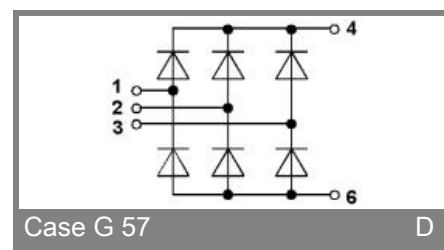
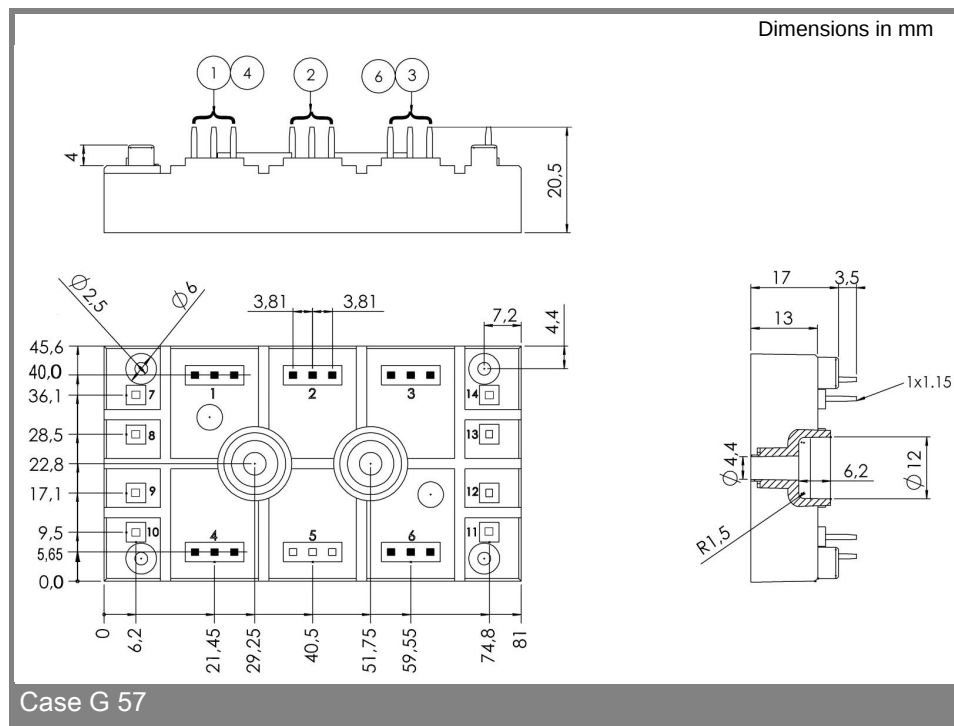
V_{RSM} V	V_{RRM}, V_{DRM} V	$I_D = 140$ A (full conduction) ($T_s = 85$ °C)
1200	1200	SKD 145/12
1600	1600	SKD 145/16
1800	1800	SKD 145/18

Symbol	Conditions	Values	Units
I_D	$T_s = 85$ °C	140	A
I_{FSM}	$T_{vj} = 25$ °C; 10 ms $T_{vj} = 125$ °C; 10 ms	1800 1700	A A
i^2t	$T_{vj} = 25$ °C; 8,3 ... 10 ms $T_{vj} = 125$ °C; 8,3 ... 10 ms	16200 14450	A ² s A ² s
V_F $V_{(TO)}$ r_T I_{RD}	$T_{vj} = 125$ °C; $I_F = 150$ A $T_{vj} = 125$ °C $T_{vj} = 125$ °C $T_{vj} = 25$ °C; $V_{DD} = V_{DRM}$; $V_{RD} = V_{RRM}$	max. 1,3 max. 0,8 max. 4	V V mΩ mA mA
R_{thjh}	per diode	0,8	K/W K/W
T_{solder} T_{vj} T_{stg}	Terminals, max 10s	260 - 40 ... + 150 - 40 ... + 125	°C °C °C
V_{isol} M_s M_t m	a. c. 50 Hz; r.m.s.; 1 s / 1 min. to heatsink; SI units	3600 (3000) 2,5 75	V Nm Nm g
Case		G 57	



D





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