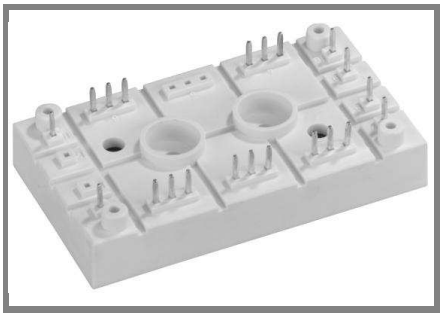
SKD 145



SEMIPONT© 5

Bridge Rectifiers

SKD 145

Features

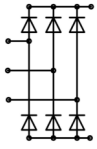
- Compact design
- SKiiP technology: thermal pressure contact, no base plate and no hard mould
- Two screws mounting
- Heat transfer and isolation through direct copper board (low R_{th})
- Low resistance in steady-state and high reliability
- High surge currents
- Up to 1800 V
- UL recognized, file 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	1800	A
	T_{vj} = 125 °C; 10 ms	1700	A
i²t	T_{vj} = 25 °C; 8,3 ... 10 ms	16200	A²s
	T_{vj} = 125 °C; 8,3 ... 10 ms	14450	A²s
V_F	T_{vj} = 125 °C; I_F = 150 A	max. 1,3	V
$V_{(TO)}$	T_{vj} = 125 °C	max. 0,8	V
r_T	T_{vj} = 125 °C	max. 4	mΩ
I_{RD}	T_{vj} = 25 °C; V_{DD} = V_{DRM}; V_{RD} = V_{RRM}		mA
			mA
R_{thjh}	per diode	0,8	K/W
			K/W
T_{solder}	Terminals, max 10s	260	°C
T_{vj}		- 40 ... + 150	°C
T_{stg}		- 40 ... + 125	°C
V_{isol}	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3600 (3000)	V
M_s	to heatsink; SI units	2,5	Nm
M_t			Nm
m		75	g
Case		G 57	



D

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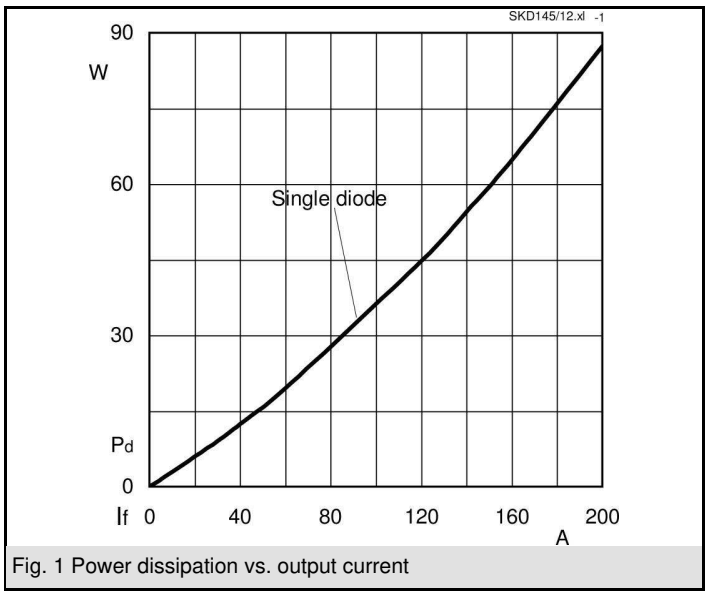


Fig. 1 Power dissipation vs. output current

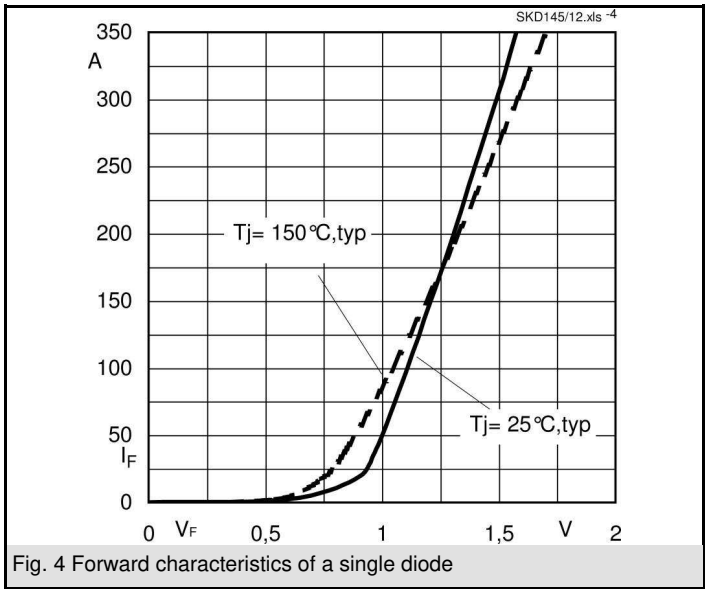
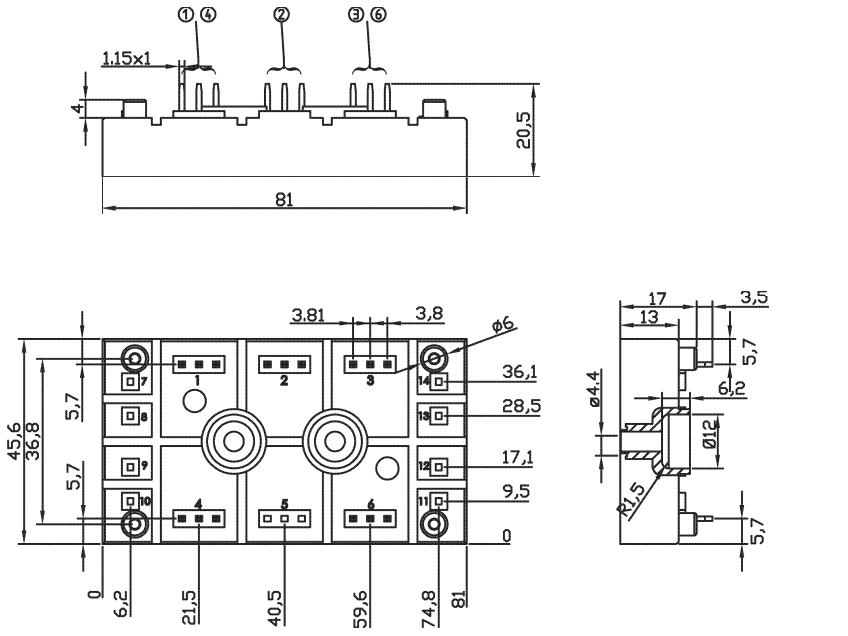


Fig. 4 Forward characteristics of a single diode

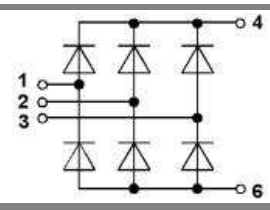
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SKD 145

Dimensions in mm



Case G 57



Case G 57 D

This is an electrostatic discharge sensitive device (ESDS), international standard IEC 60747-1, chapter IX.

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