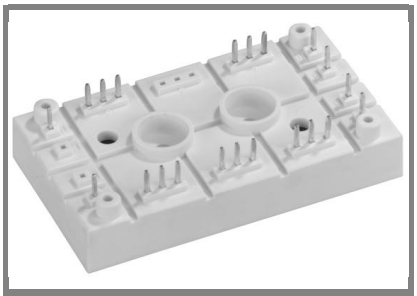
SKD 115



SEMIPONT© 5

Bridge Rectifiers

SKD 115

Target Data

Features

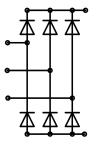
- Compact design
- SKiiP technology: thermal pressure contact, no base plate and no hard mould
- Two screws mounting
- Heat transfer and isolation through direct copper board (low R_{th})
- Low resistance in steady-state and high reliability
- High surge currents
- Up to 1800 V
- UL recognized, file 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 = 110 A (full conduction) (T_s = 85 °C)
1200	1200	SKD 115/12
1600	1600	SKD 115/16
1800	1800	SKD 115/18

Symbol	Conditions	Values	Units
I_D	T_s = 85 °C	110	A
I_{FSM}	T_{vj} = 25 °C; 10 ms	1200	A
	T_{vj} = 125 °C; 10 ms	1150	A
i^2t	T_{vj} = 25 °C; 8,3 ... 10 ms	7200	A^2s
	T_{vj} = 125 °C; 8,3 ... 10 ms	6600	A^2s
V_F	T_{vj} = 125 °C; I_F = 75 A	max. 1,25	V
$V_{(TO)}$	T_{vj} = 125 °C	max. 0,8	V
r_T	T_{vj} = 125 °C	max. 7	mΩ
I_{RD}	T_{vj} = 25 °C; V_{DD} = V_{DRM}; V_{RD} = V_{RRM}		mA
			mA
R_{thjh}	per diode	1	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	approx.	75	g
Case		G 57	



D

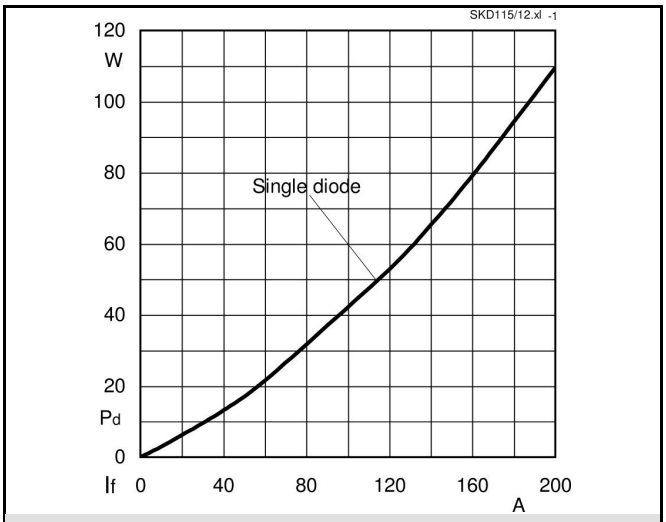


Fig. 1 Power dissipation vs. output current

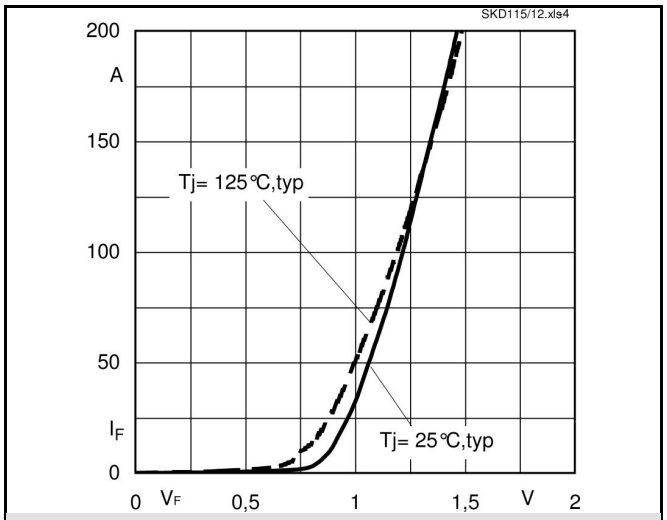
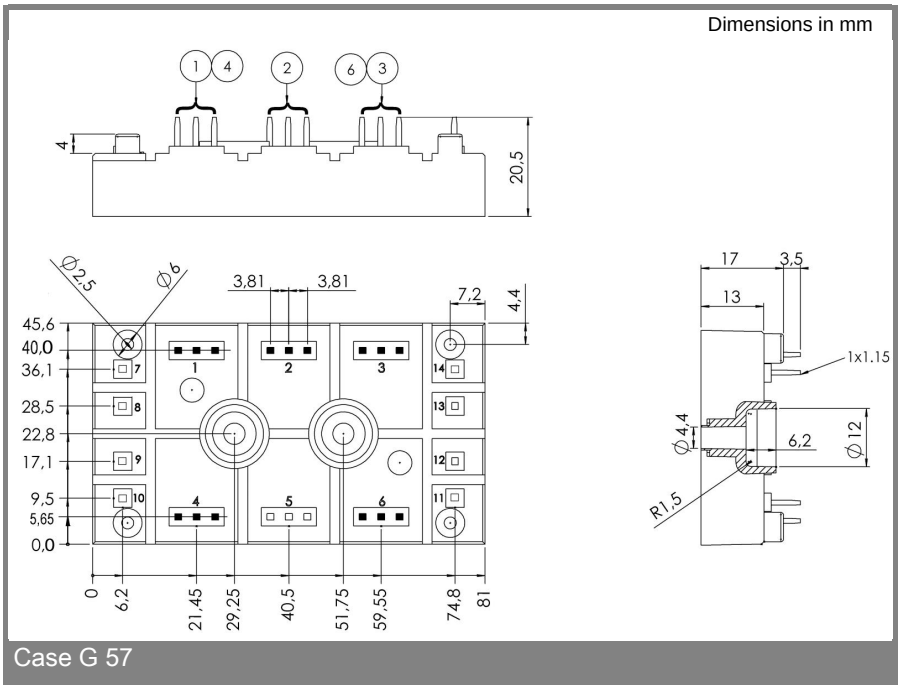
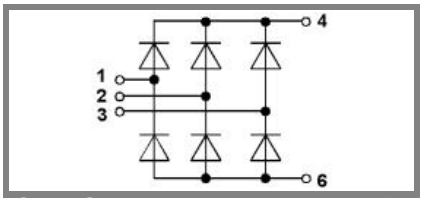


Fig. 4 Forward characteristics of a single diode

SKD 115



Case G 57



Case G 57 D

* The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON products in life support appliances and systems is subject to prior specification and written approval by SEMIKRON. We therefore strongly recommend prior consultation of our personal.