

**SEMIPONT<sup>®</sup> 5**

## Bridge Rectifiers

### SKD 145

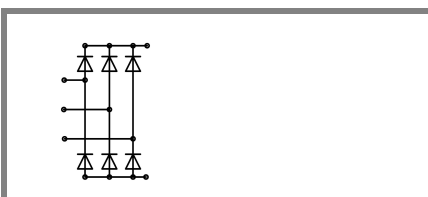
Target Data

### 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

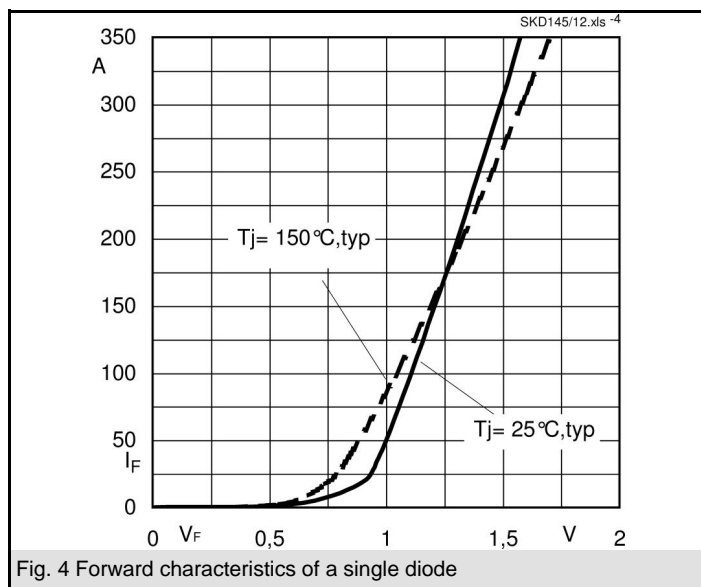
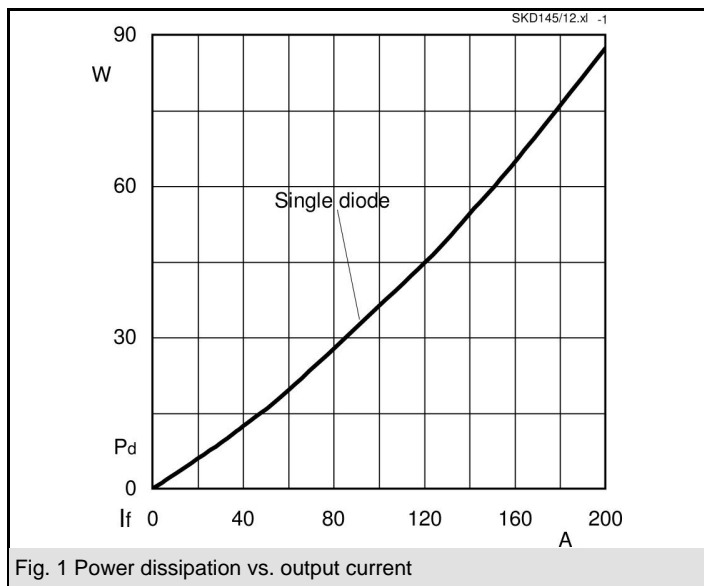
- Three phase rectifiers for power supplies
- Input rectifiers for variable frequency drives
- Rectifiers for DC motor field supplies
- Battery charger rectifiers

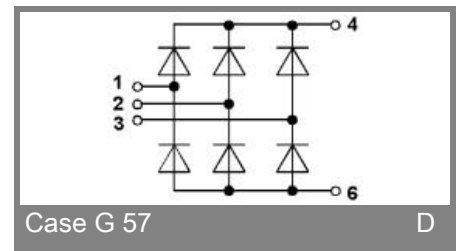
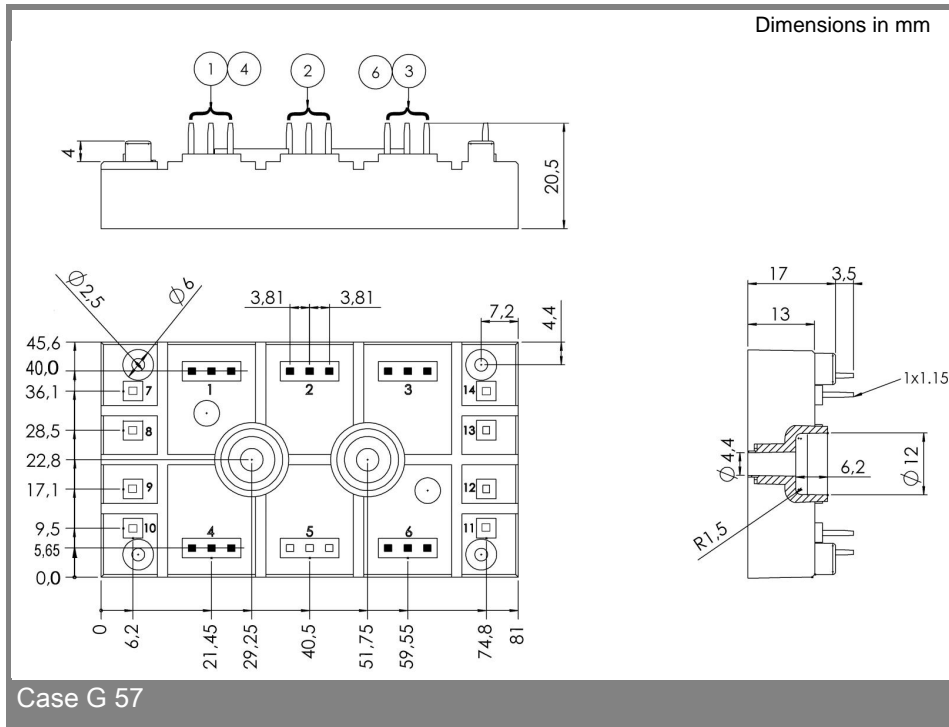


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$V_{RSM}$ V	$V_{RRM}, V_{DRM}$ V	$I_D = 140$ A (full conduction) ( $T_s = 85$ °C)
1200	1200	SKD 145/12
1600	1600	SKD 145/16
1800	1800	SKD 145/18

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
$i^2t$	$T_{vj} = 25$ °C; 8,3 ... 10 ms	16200	A <sup>2</sup> s
	$T_{vj} = 125$ °C; 8,3 ... 10 ms	14450	A <sup>2</sup> s
$V_F$	$T_{vj} = 125$ °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
$R_{thjh}$	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	





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