

## SEMIPONT™ 6

## Bridge Rectifiers

## SKD146/16

## Preliminary Data

## Features

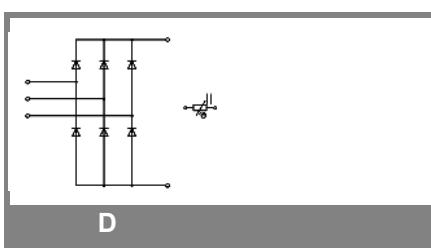
- Compact design
- Two screws mounting
- Heat transfer and isolation through direct copper bonded aluminium oxide ceramic (DCB)
- High surge currents
- Up to 1600 V reverse voltage
- UL recognized, file no. E 63 532

## Typical Applications

- DC drives
- Controlled field rectifiers for DC motor
- Controlled battery charger

$V_{RSM}$ V 1700	$V_{RRM}, V_{DRM}$ V 1600	$I_D = 140$ A (full conduction) ( $T_s = 85$ °C) SKD 146/16
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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	A²s 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	$m\Omega$
$I_{RD}$	$T_{vj} = 25$ °C; $V_{DD} = V_{DRM}; V_{RD} = V_{RRM}$		mA
Temperature sensor $R_{TS}$	$T = 25$ (100) °C	1000 (1670)	mA
$R_{thjh}$	per diode	0,8	K/W
$T_{solder}$	Terminals, max 10s	260	K/W
$T_{vj}$		- 40 ... + 150	°C
$T_{stg}$		- 40 ... + 125	°C
$V_{isol}$	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3600 (3000)	V
$M_s$	mounting torque	2,55 ... 3,45	Nm
$M_t$			Nm
$m$			g
Case		G 60	



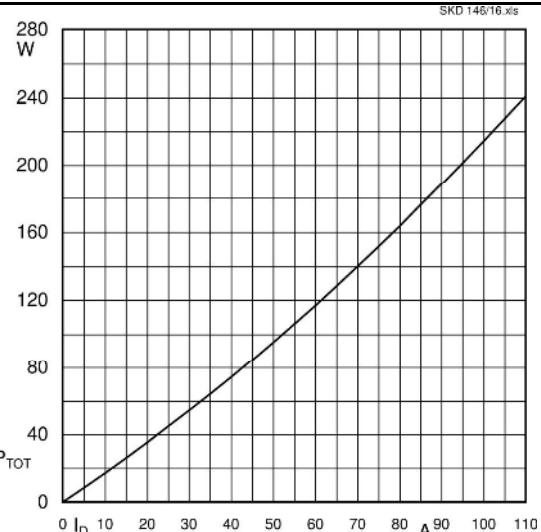


Fig. 1 Power dissipation vs. output current

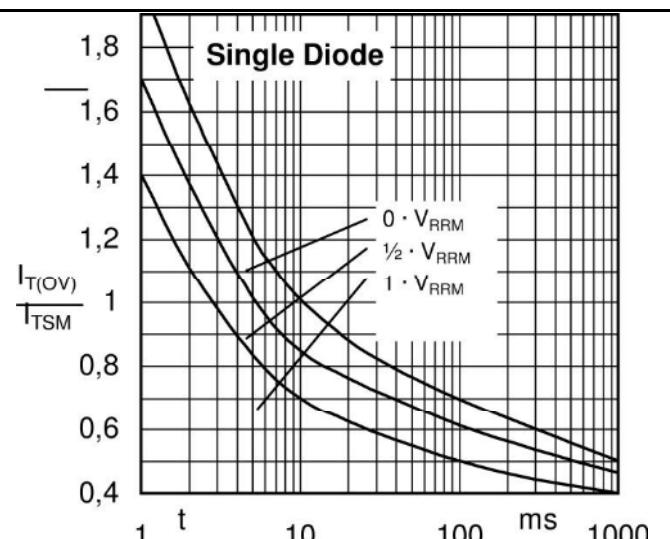


Fig. 2 Surge overload current vs. time

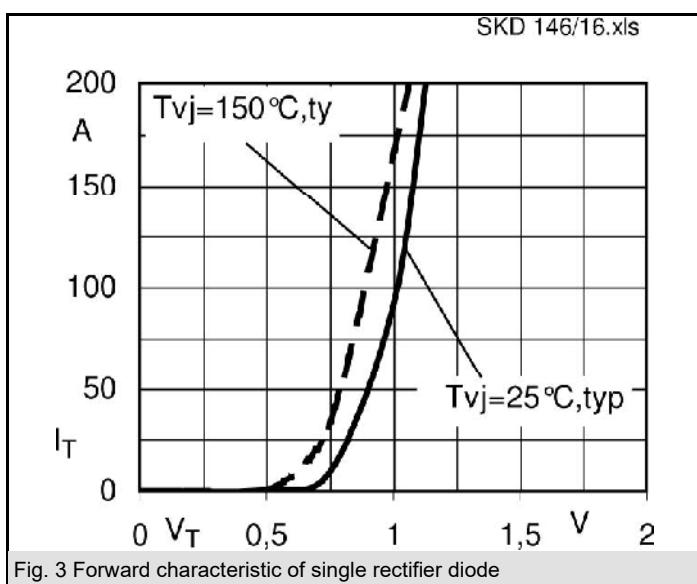


Fig. 3 Forward characteristic of single rectifier diode

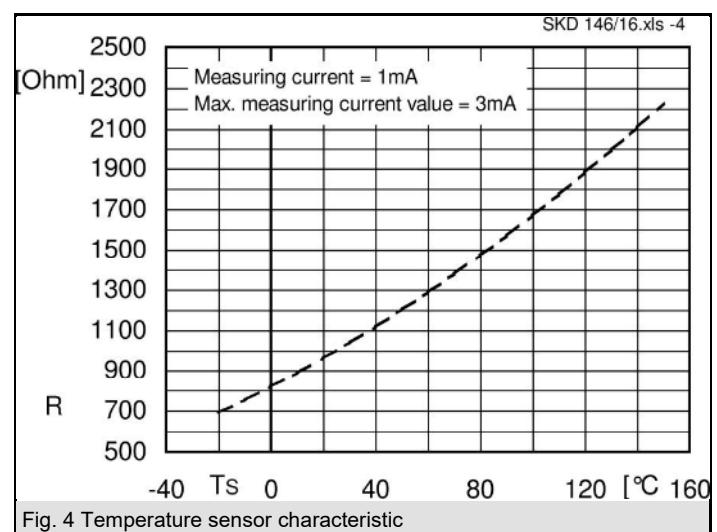
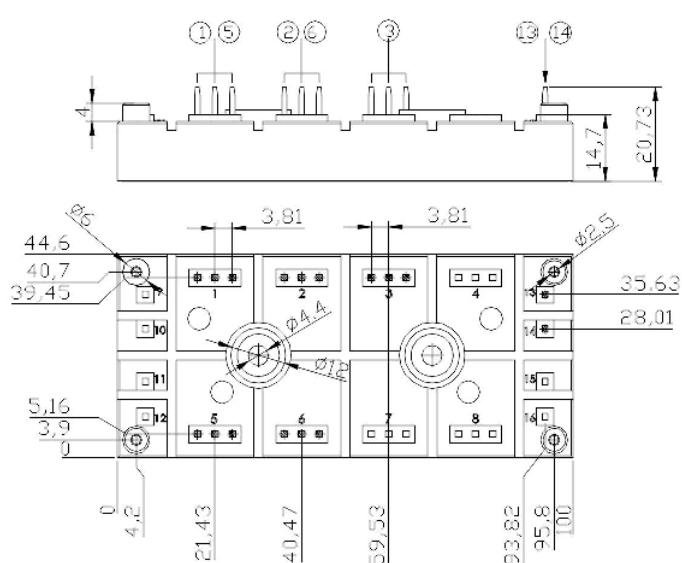


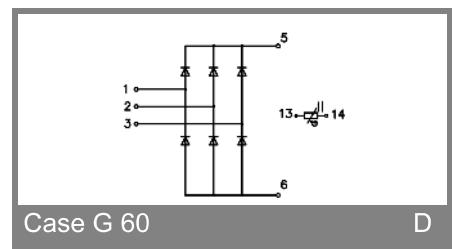
Fig. 4 Temperature sensor characteristic

UL recognized mm  
File no. E 63 532

Dimensions in mm



Case G 60



Case G 60

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