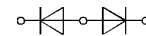


## SEMIPACK® 2 Rectifier Diode Modules SKND 165



**SKND**

### Features

- Heat transfer through aluminium oxide ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- **SKND** center-tap connection common anode
- UL recognized file no. E63 532

### Typical Applications

- Non-controllable rectifiers
- Line rectifiers for transistorized AC motor controllers
- Field supply for DC motors

$V_{RSM}$	$V_{RRM}$	$I_{FRMS}$ (maximum value for continuous operation) 350 A
V	V	$I_{FAV}$ (sin. 180; $T_{case} = 100\text{ °C}$ ) 220 A
400	400	<b>SKND 165/04</b>
600	600	<b>SKND 165/06</b>
800	800	<b>SKND 165/08</b>
1200	1200	<b>SKND 165/12</b>

Symbol	Conditions	SKND 165	Units
$I_{FAV}$	sin. 180; $T_{case} = 100\text{ °C}$	220	A
$I_{FSM}$	$T_{vj} = 25\text{ °C}; 10\text{ ms}$	5000	A
	$T_{vj} = 150\text{ °C}; 10\text{ ms}$	4000	A
$i^2t$	$T_{vj} = 25\text{ °C}; 8,3...10\text{ ms}$	125 000	$A^2\text{ s}$
	$T_{vj} = 150\text{ °C}; 8,3...10\text{ ms}$	80 000	$A^2\text{ s}$
$I_{RD}$	$T_{vj} = 25\text{ °C}; V_{RD} = V_{RRM}$	2	mA
	$T_{vj} = 150\text{ °C}; V_{RD} = V_{RRM}$	20	mA
$V_F$	$T_{vj} = 25\text{ °C}; I_F = 500\text{ A}; \text{max.}$	1,45	V
$V_{(TO)}$	$T_{vj} = 150\text{ °C}$	0,85	V
$r_T$	$T_{vj} = 150\text{ °C}$	1,2	$m\Omega$
$R_{thjc}$	} per diode/per module	0,15 / 0,075	$^{\circ}\text{C/W}$
$R_{thch}$		0,10/0,05	$^{\circ}\text{C/W}$
$T_{vj}$		- 40 ... +150	$^{\circ}\text{C}$
$T_{stg}$		- 40 ... +125	$^{\circ}\text{C}$
$V_{isol}$	a. c. 50 Hz; r.m.s; 1 s/1 min	3600 / 3000	V~
$M_1$	to heatsink	5 (44 lb.in.) $\pm 15\%$ <sup>1)</sup>	Nm
$M_2$	to terminals	5 (44 lb.in.) $\pm 15\%$	Nm
a		5 · 9,81	$m/s^2$
w	approx.	250	g
Case	→ page B 1 – 96	A 52	

<sup>1)</sup> see assembly instructions

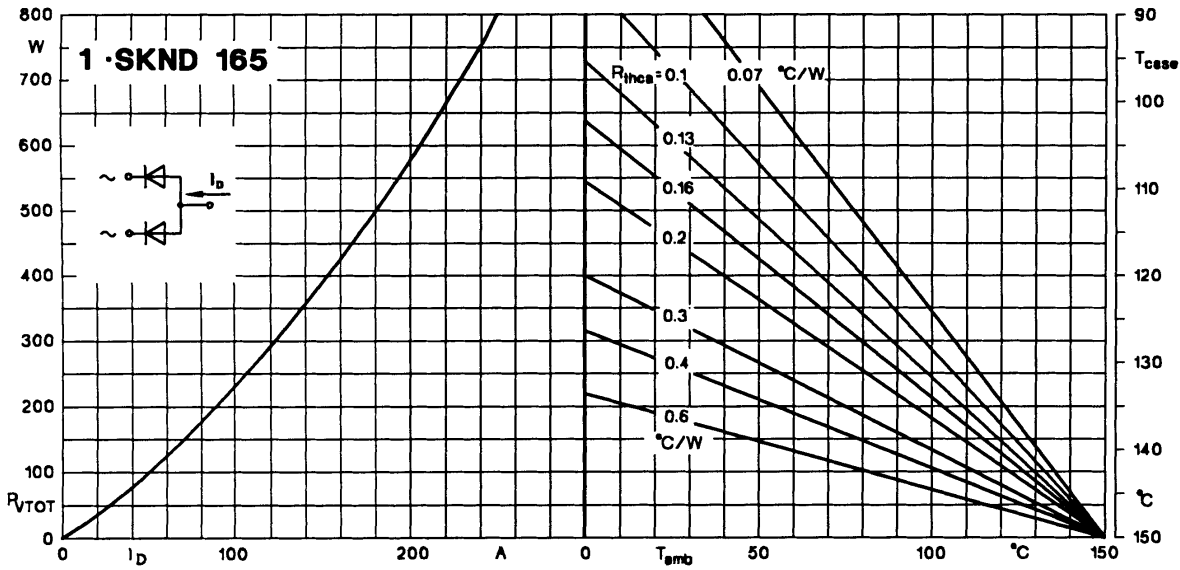


Fig. 12 Power dissipation of two modules vs. direct current and case temperature

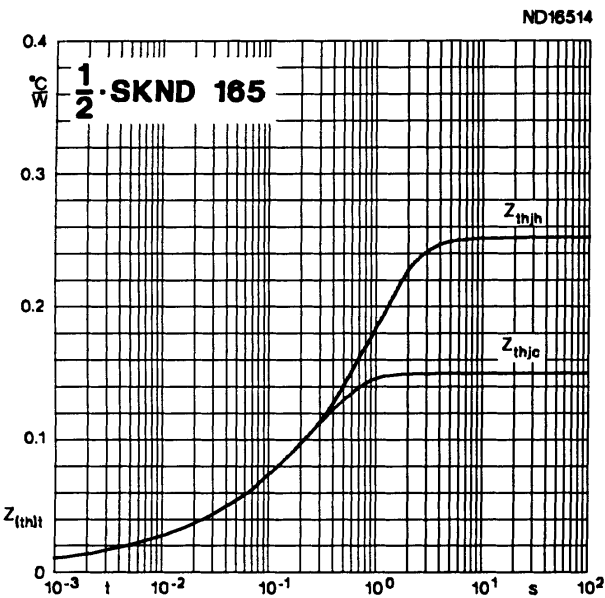


Fig. 14 Transient thermal impedance vs. time

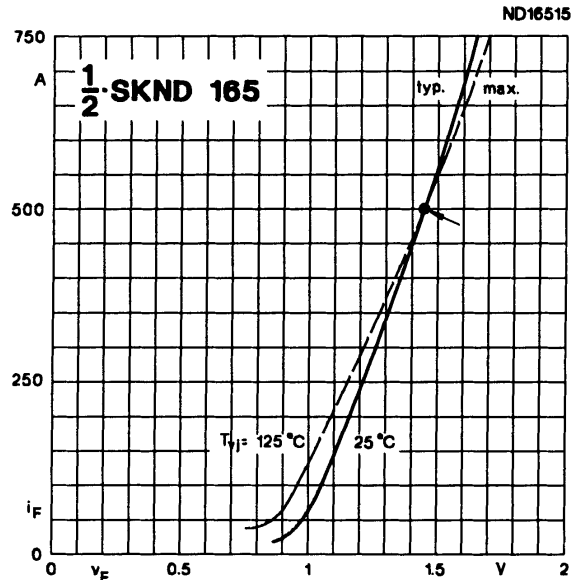


Fig. 15 Forward characteristics

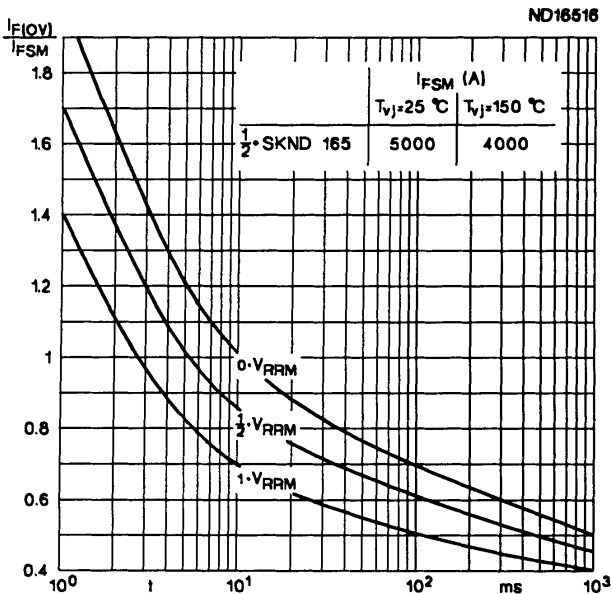


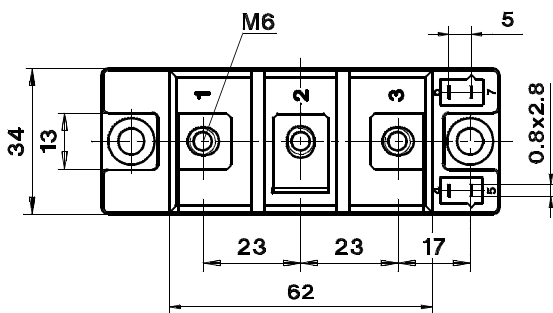
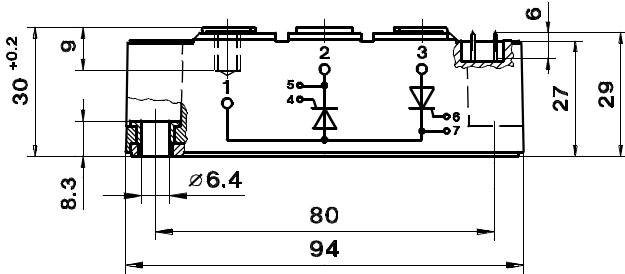
Fig. 16 Surge overload current vs. time

**SKKT 122, 132, 162**

Case A 21

SEMIPACK® 2

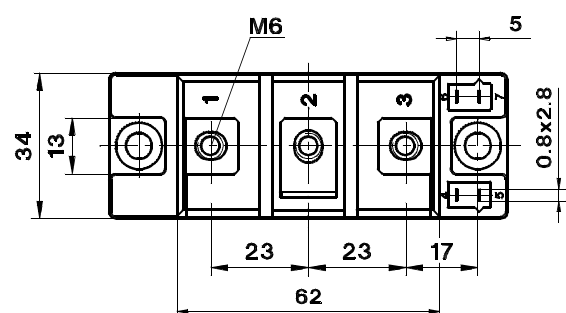
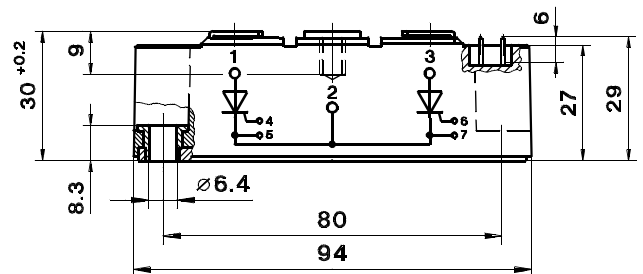
UL recognized, file no. E 63 532

**SKMT 132**

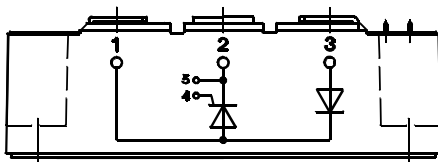
Case A 50

SEMIPACK® 2

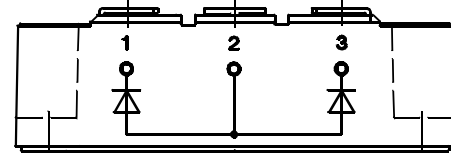
UL recognized, file no. E 63 532

**SKKH 122, 132, 162**

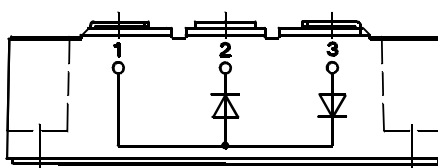
Case A 22

**SKND 165**

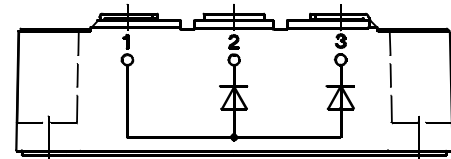
Case A 52

**SKKD 162**

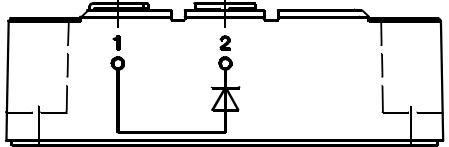
Case A 23

**SKND 162**

Case A 57

**SKKE 162**

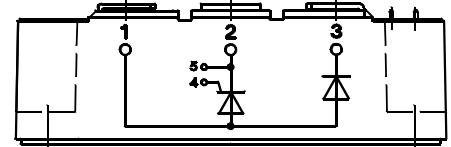
Case A 24



Dimensions in mm

**SKNH 132**

Case A 61



Dimensions in mm