

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	SKND 165/04
600	600	SKND 165/06
800	800	SKND 165/08
1200	1200	SKND 165/12

SEMIPACK® 2

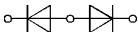
Rectifier Diode Modules

SKND 165



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

¹⁾ see assembly instructions



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

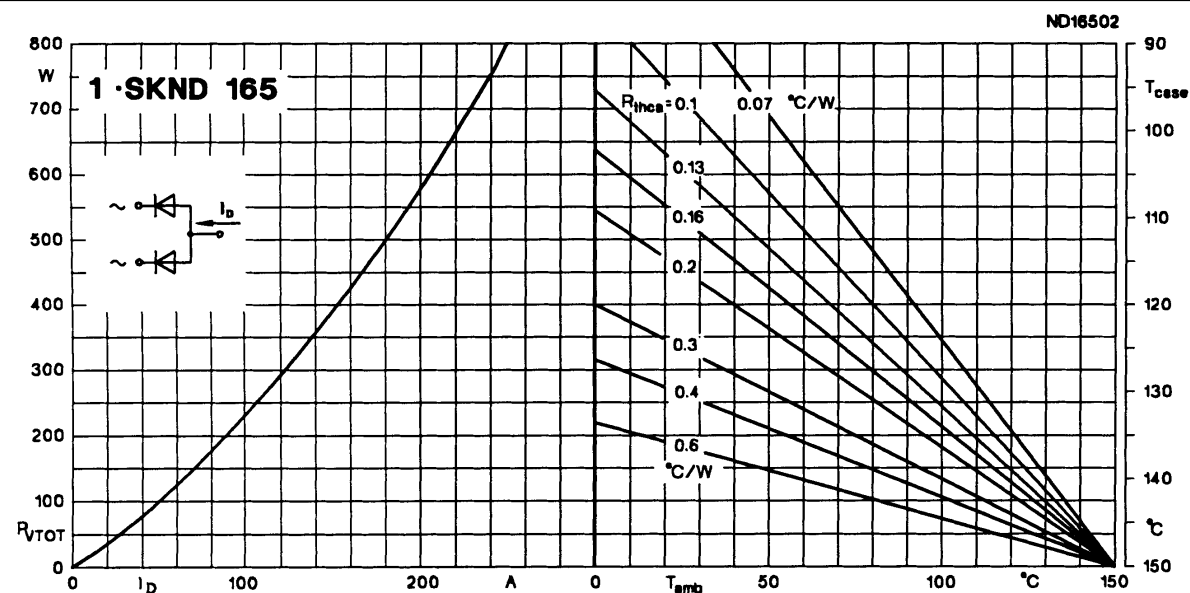


Fig. 12 Power dissipation of two modules vs. direct current and case temperature

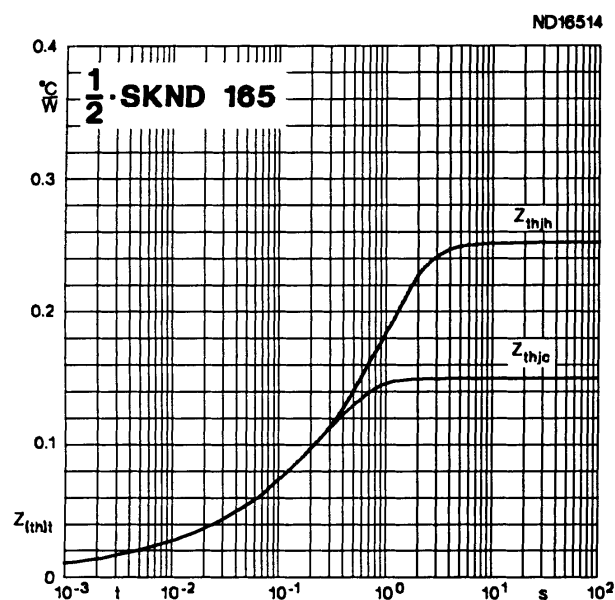


Fig. 14 Transient thermal impedance vs. time

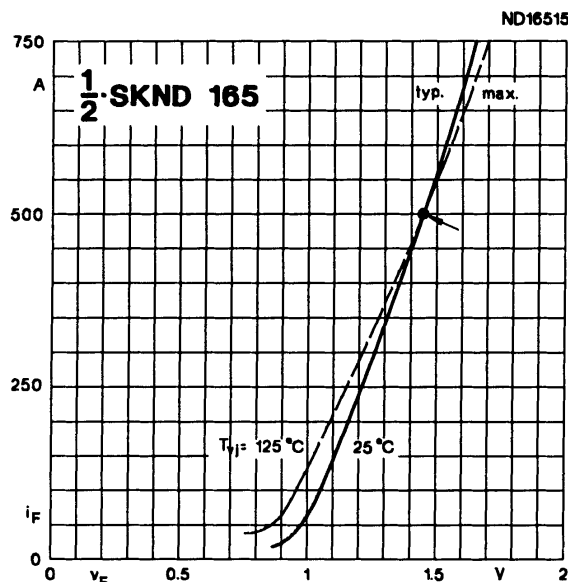


Fig. 15 Forward characteristics

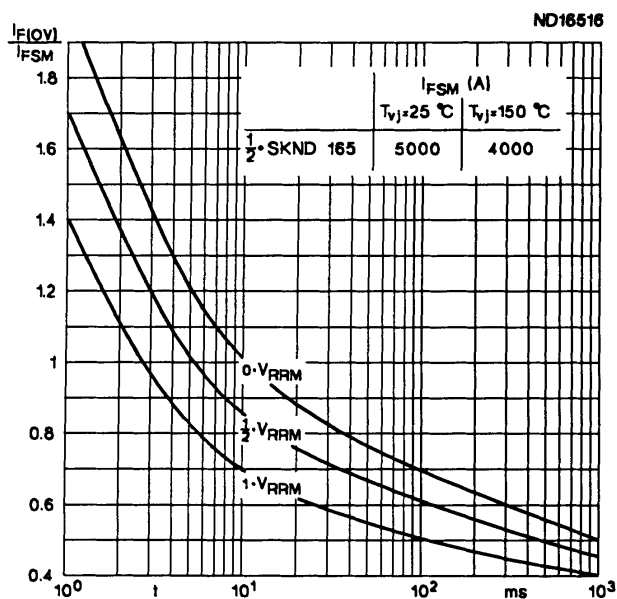
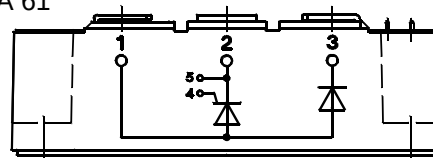
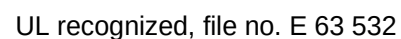


Fig. 16 Surge overload current vs. time

UL recognized, file no. E 63 532



Dimensions in mm