



SEMiX® 1s

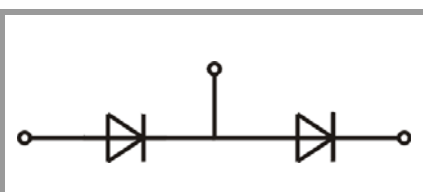
Rectifier Diode Module SEMiX191KD16s

Features

Terminal height 17 mm
Chips soldered directly to isolated substrate

Typical Applications*

- Input Bridge Rectifier for AC/DC motor control
- Power supply



KD

Absolute Maximum Ratings				
Symbol	Conditions		Values	Unit
Rectifier Diode				
I_{FAV}	sin. 180°	$T_c = 85\text{ °C}$	190	A
		$T_c = 100\text{ °C}$	145	A
I_{FSM}	10 ms	$T_j = 25\text{ °C}$	6000	A
		$T_j = 130\text{ °C}$	5000	A
i^2t	10 ms	$T_j = 25\text{ °C}$	180000	A ² s
		$T_j = 130\text{ °C}$	125000	A ² s
V_{RSM}			1700	V
V_{RRM}			1600	V
T_j			-40 ... 130	°C
Module				
T_{stg}			-40 ... 125	°C
V_{isol}	AC sinus 50Hz	1 min	4000	V
		1 s	4800	V

Characteristics						
Symbol	Conditions		min.	typ.	max.	Unit
Diode						
V_F	$T_j = 25\text{ °C}, I_F = 500\text{ A}$				1.5	V
$V_{(TO)}$	$T_j = 130\text{ °C}$				0.85	V
r_T	$T_j = 130\text{ °C}$				0.95	mΩ
I_{RD}	$T_j = 130\text{ °C}, V_{RD} = V_{RRM}$				12	mA
$R_{th(j-c)}$		per diode				K/W
						K/W
$R_{th(j-c)}$	sin. 180	per diode			0.18	K/W
						K/W
Module						
$R_{th(c-s)}$	per chip					K/W
	per module			0.075		K/W
M_s	to heat sink (M5)		3		5	Nm
M_t	to terminals (M6)		2.5		5	Nm
a					5 * 9,81	m/s ²
w				145		g

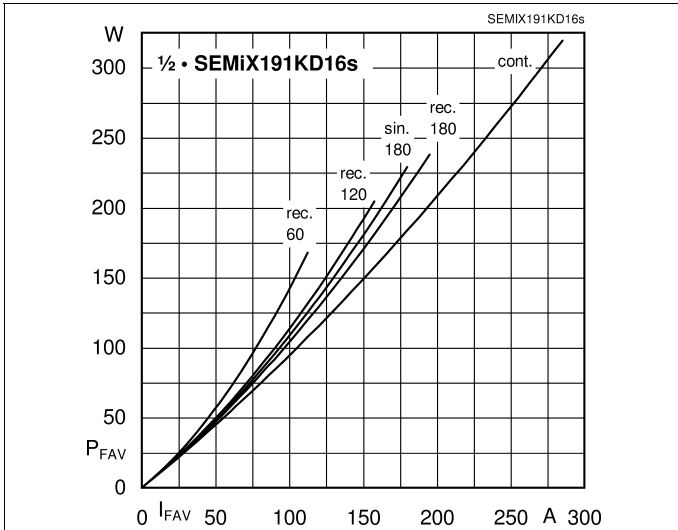


Fig. 1L: Power dissipation per thyristor/diode vs. on-state current

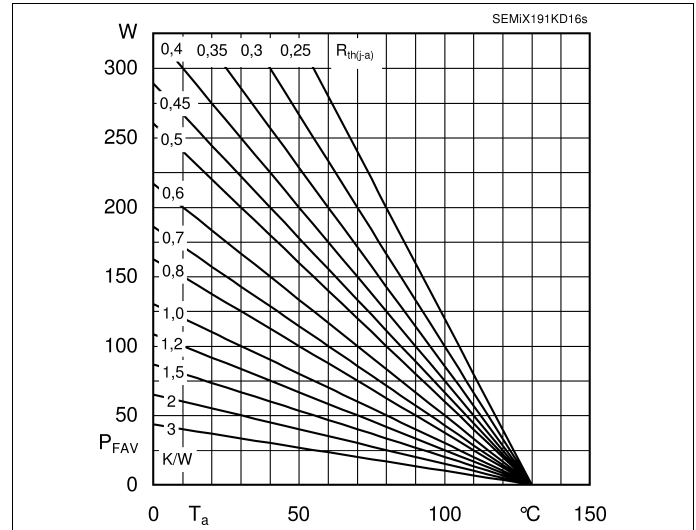


Fig. 1R: Power dissipation per thyristor/diode vs. ambient temperature

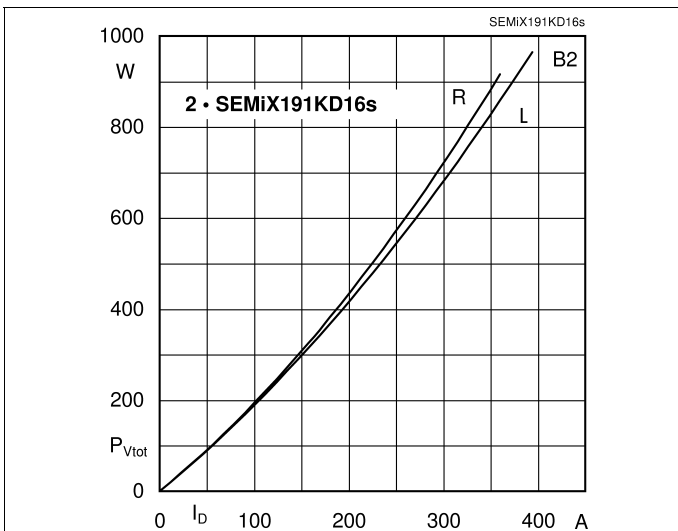


Fig. 3L: Power dissipation of two modules vs. direct current

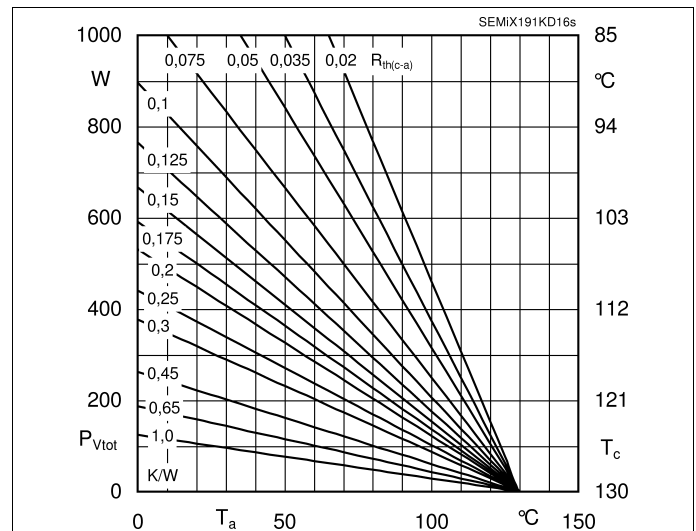


Fig. 3R: Power dissipation of two modules vs. case temperature

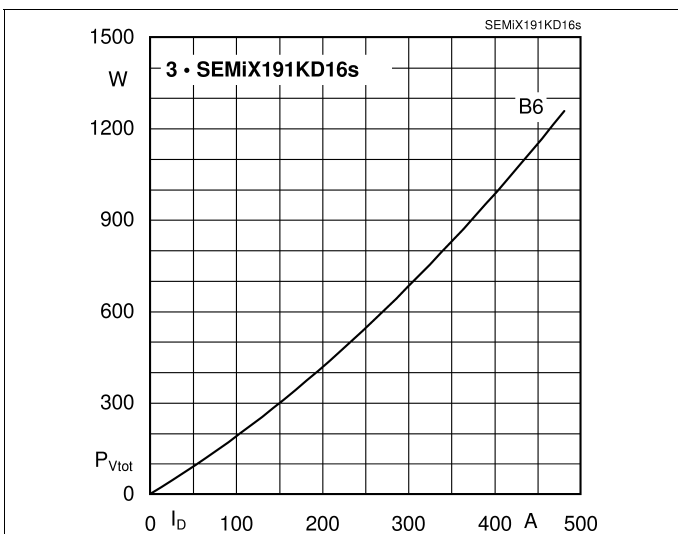


Fig. 4L: Power dissipation of three modules vs. direct current

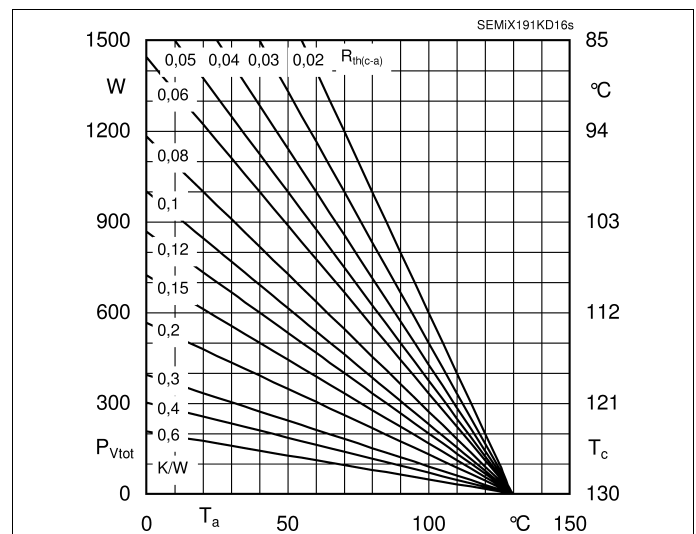


Fig. 4R: Power dissipation of three modules vs. case temperature

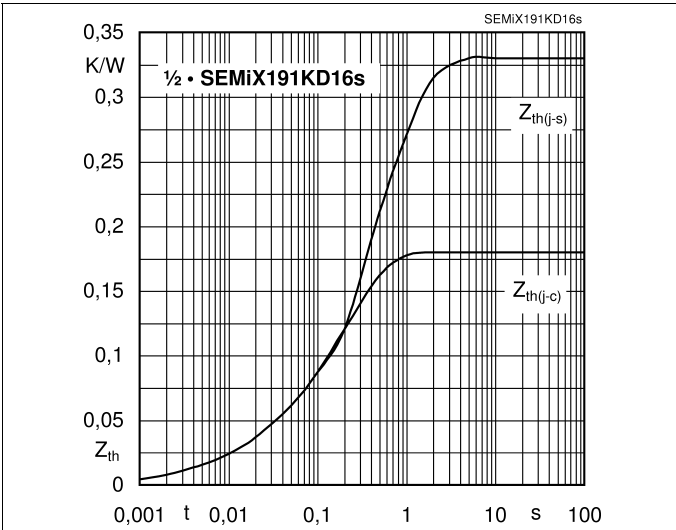


Fig. 6: Transient thermal impedance vs. time

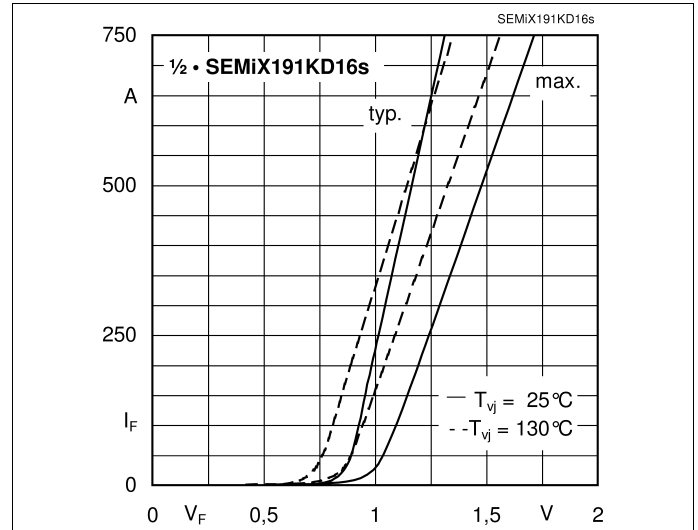


Fig. 7: On-state characteristics

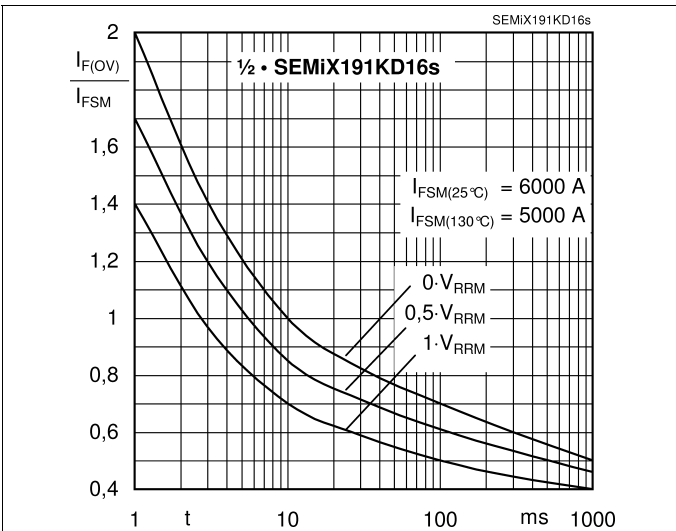


Fig. 8: Surge overload current vs. time

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Schottky Diodes & Rectifiers](#) category:

Click to view products by [Semikron](#) manufacturer:

Other Similar products are found below :

[CUS06\(TE85L,Q,M\)](#) [MA4E2508M-1112](#) [D1FH3-5063](#) [MBR0530L-TP](#) [MBR10100CT-BP](#) [MBR30H100MFST1G](#) [MMBD301M3T5G](#)
[PMAD1103-LF](#) [PMAD1108-LF](#) [RB160M-50TR](#) [RB520S-30](#) [RB551V-30](#) [D83C](#) [DD350N18K](#) [DZ435N40K](#) [DZ600N16K](#)
[BAS16E6433HTMA1](#) [BAS 3010S-02LRH E6327](#) [BAT 15-099R E6327](#) [BAT 54-02LRH E6327](#) [NRVBAF360T3G](#) [NRVTS10100MFST1G](#)
[NRVTS12100EMFST1G](#) [NSR05F40QNXT5G](#) [NSVR05F40NXT5G](#) [JANS1N6640](#) [SB07-03C-TB-H](#) [SB1003M3-TL-W](#) [SBAT54CWT1G](#)
[SK32A-LTP](#) [SK33A-TP](#) [SK34A-TP](#) [SK34B-TP](#) [SMD1200PL-TP](#) [ACDBN160-HF](#) [SS3003CH-TL-E](#) [STPS3045CPIRG](#) [STPS30S45CW](#)
[PDS3100Q-7](#) [GA01SHT18](#) [CRS10I30A\(TE85L,QM\)](#) [CRS10I30B\(TE85L,QM\)](#) [MBR1240MFST1G](#) [MBR20100CT-BP](#) [MBRB30H30CT-1G](#)
[BAS28E6433HTMA1](#) [BAS 70-02L E6327](#) [BYS11-90-E3TR3](#) [JANTX1N5712-1](#) [VS-STPS40L45CW-N3](#)