



SEMIX[®] 1s

Rectifier Diode Module

SEMIX 191KD

Preliminary Data

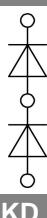
Features

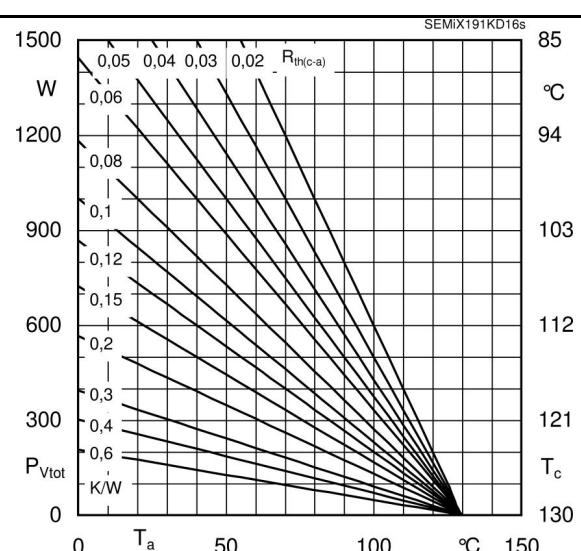
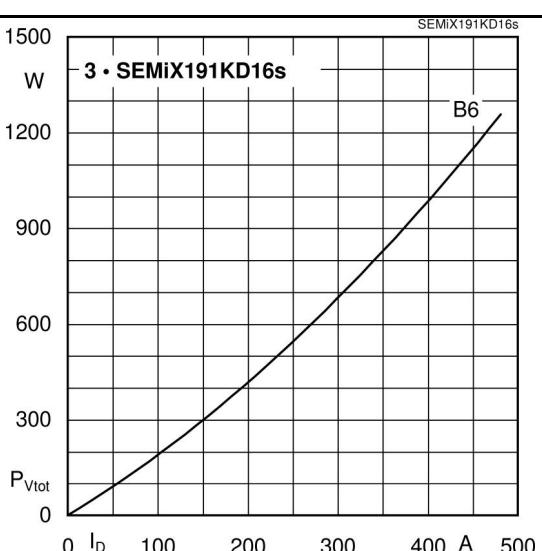
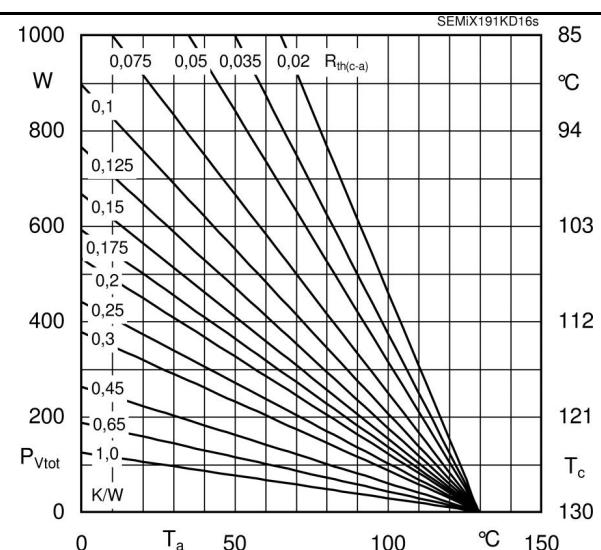
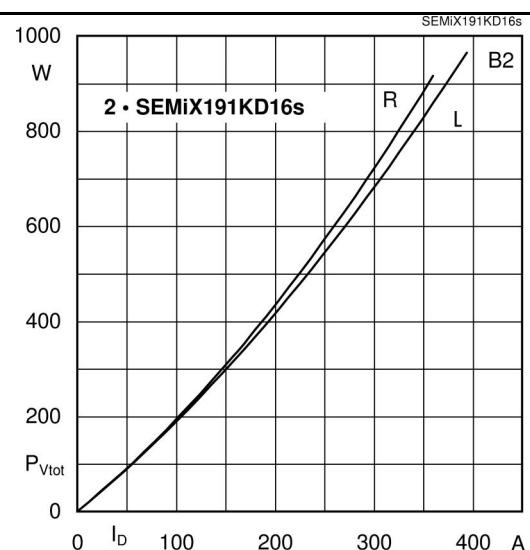
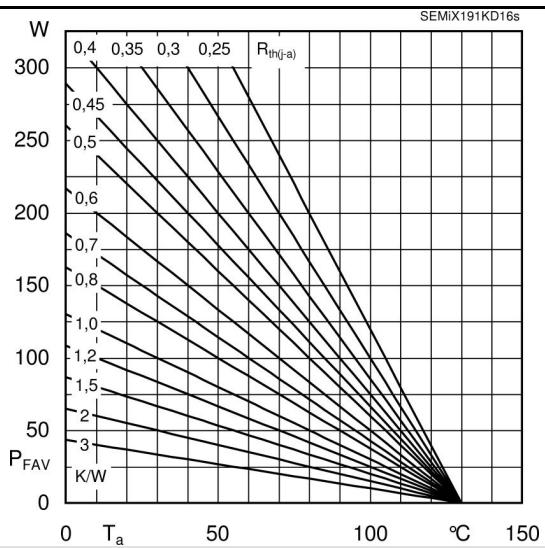
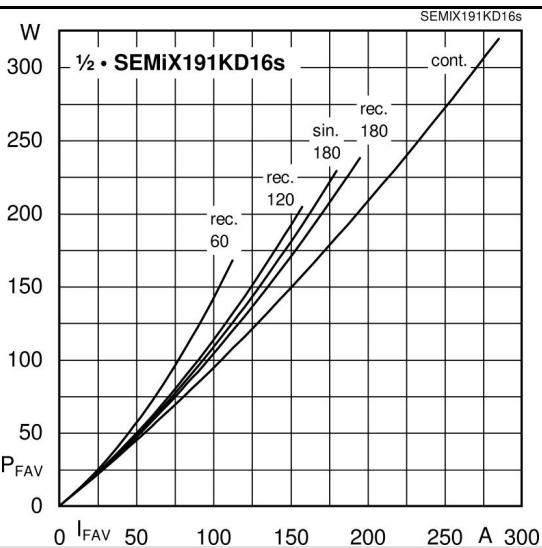
- Terminal height 17 mm
- Chips soldered directly to isolated substrate

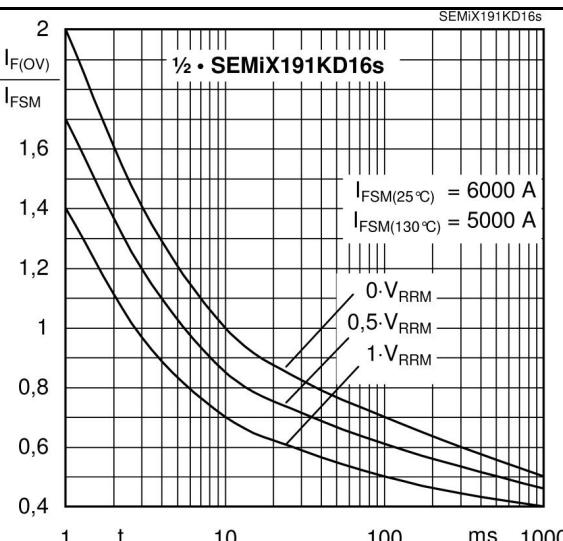
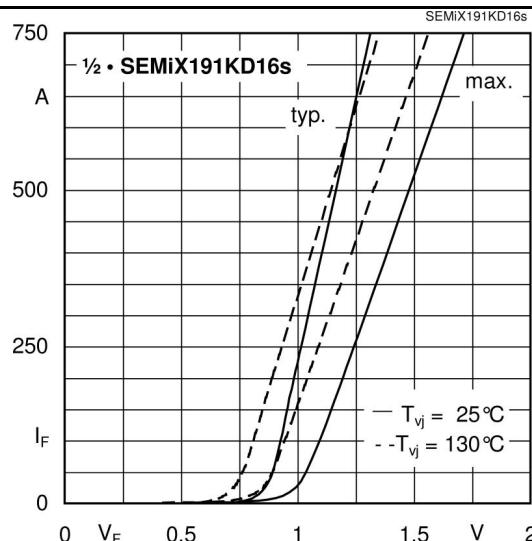
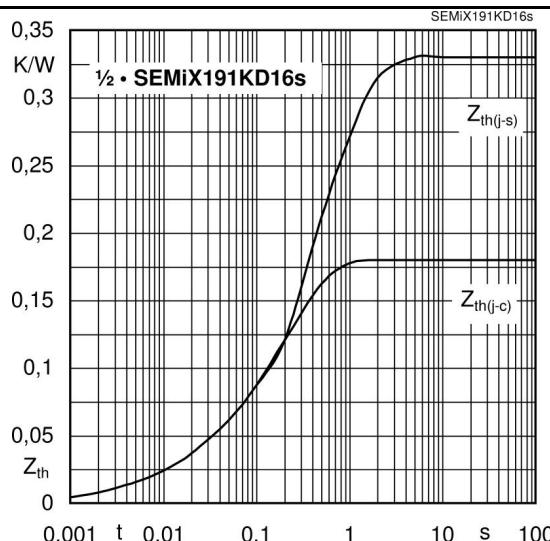
Typical Applications

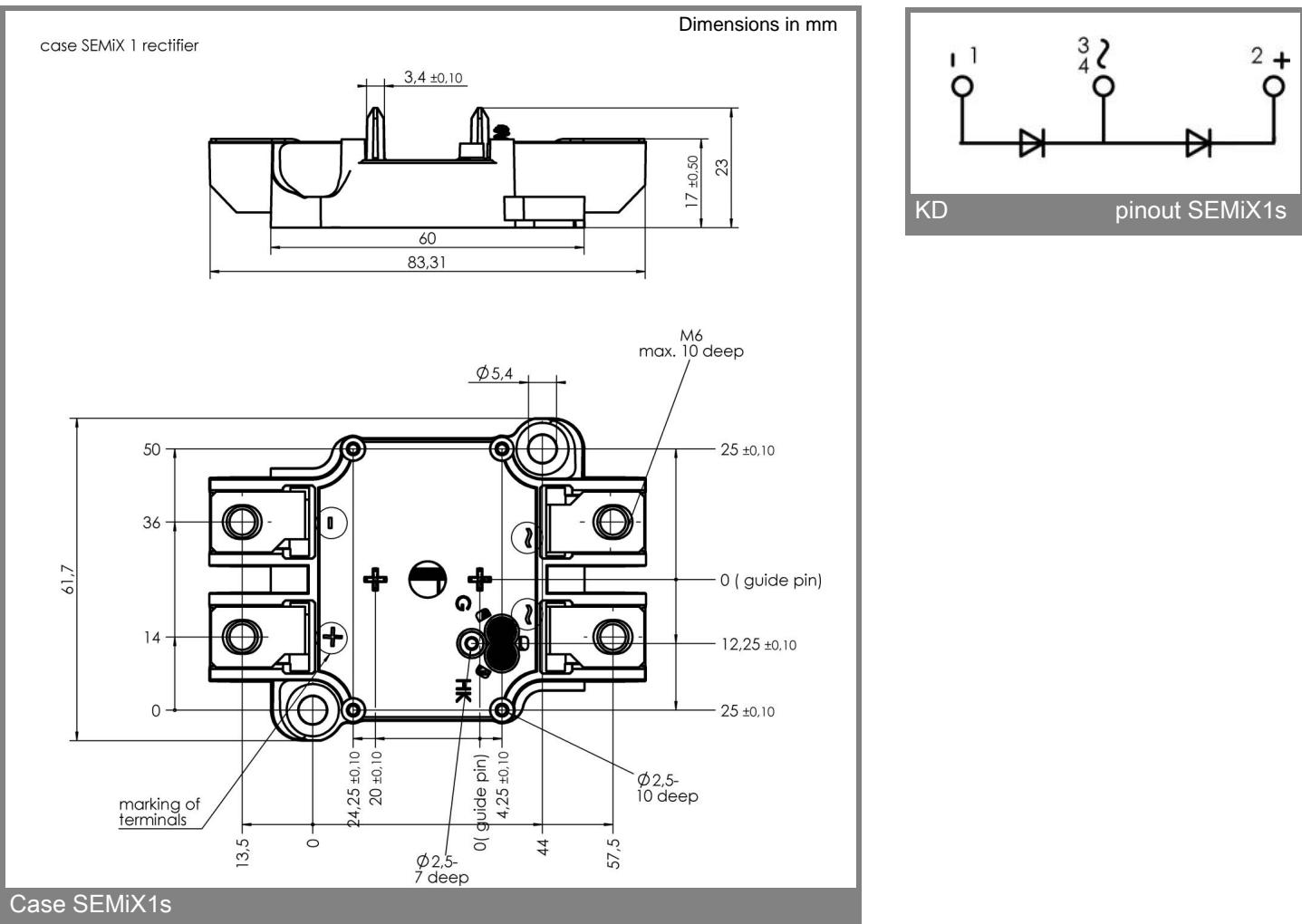
- Input Bridge Rectifier for
- AC/DC motor control
- power supply

V_{RSM}	V_{RRM}	$I_{FRMS} = 285 \text{ A}$ (maximum value for continuous operation)	
V	V	$I_{FAV} = 190 \text{ A}$ (sin. 180; $T_c = 85^\circ\text{C}$)	
1700	1600	SEMiX 191KD16s	
Symbol	Conditions	Values	Units
I_{FAV}	sin. 180; $T_c = 85$ (100) $^\circ\text{C}$	190 (145)	A
I_{FSM}	$T_{vj} = 25^\circ\text{C}; 10 \text{ ms}$ $T_{vj} = 130^\circ\text{C}; 10 \text{ ms}$	6000 5000	A A
i^2t	$T_{vj} = 25^\circ\text{C}; 8,3 \dots 10 \text{ ms}$ $T_{vj} = 130^\circ\text{C}; 8,3 \dots 10 \text{ ms}$	180000 125000	A ² s A ² s
V_F	$T_{vj} = 25^\circ\text{C}; I_F = 500 \text{ A}$	max. 1,5	V
$V_{(TO)}$	$T_{vj} = 130^\circ\text{C}$	max. 0,85	V
r_T	$T_{vj} = 130^\circ\text{C}$	max. 0,95	m Ω
I_{RD}	$T_{vj} = 130^\circ\text{C}; V_{RD} = V_{RRM}$	max. 12	mA
$R_{th(j-c)}$	per diode	0,18	K/W
$R_{th(c-s)}$	per module	0,075	K/W
T_{vj}		- 40 ... + 130	°C
T_{stg}		- 40 ... + 125	°C
V_{isol}	AC, 50Hz, rms; 1s/1min	4800 / 4000	V~
M_s	(min./max.)	3/5	Nm
M_t	(min./max.)	2,5/5	Nm
a		5 * 9,81	m/s ²
m	approx.	145	g
Case	SEMiX 1s		









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