



**SEMiX® 2s**

## Rectifier Diode Module

### SEMiX 302KD

#### Preliminary Data

#### Features

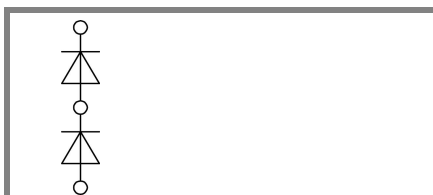
- Terminal height 17 mm
- Chips soldered directly to isolated substrate

#### Typical Applications

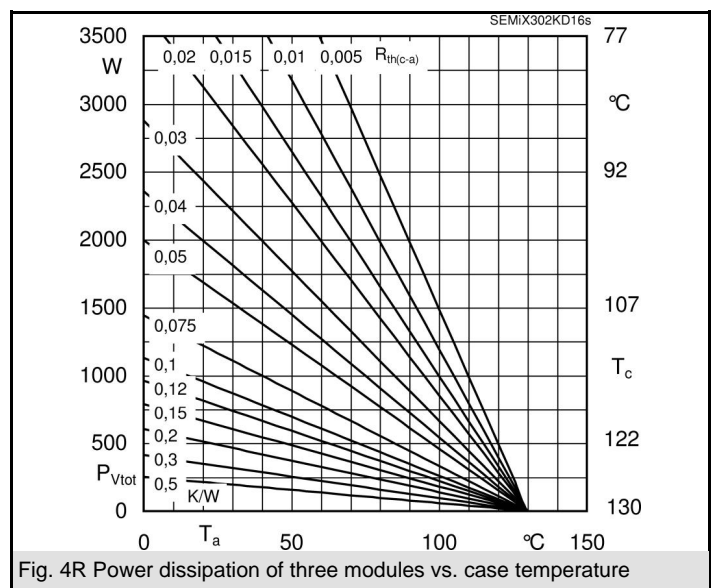
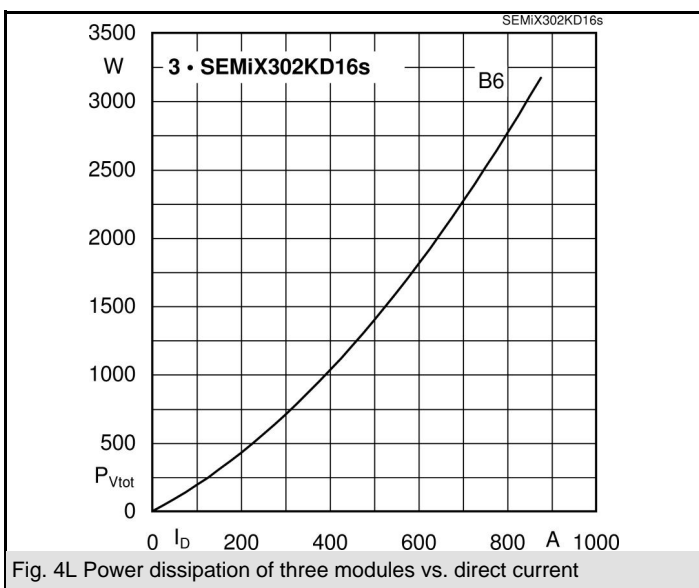
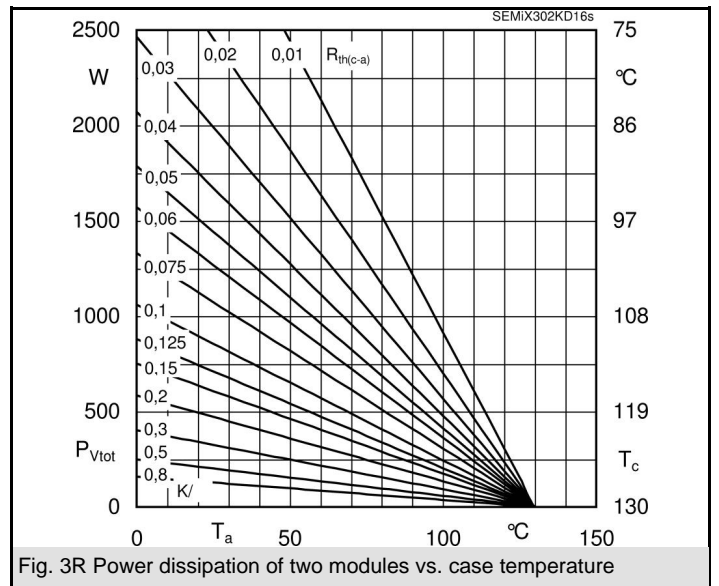
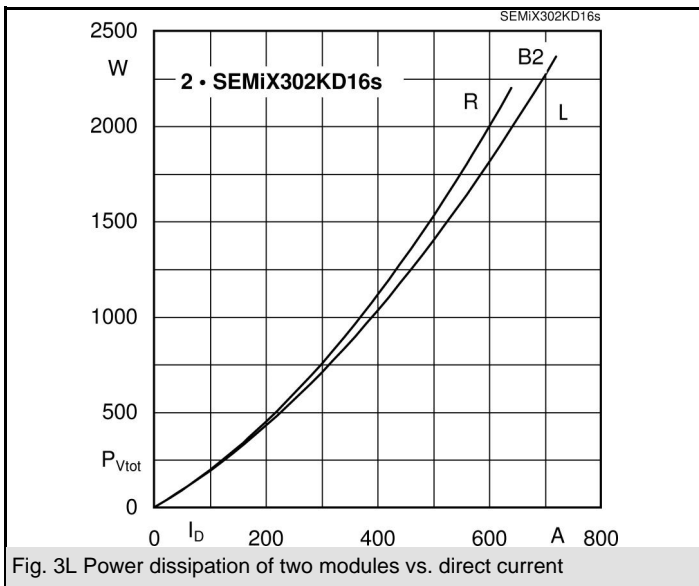
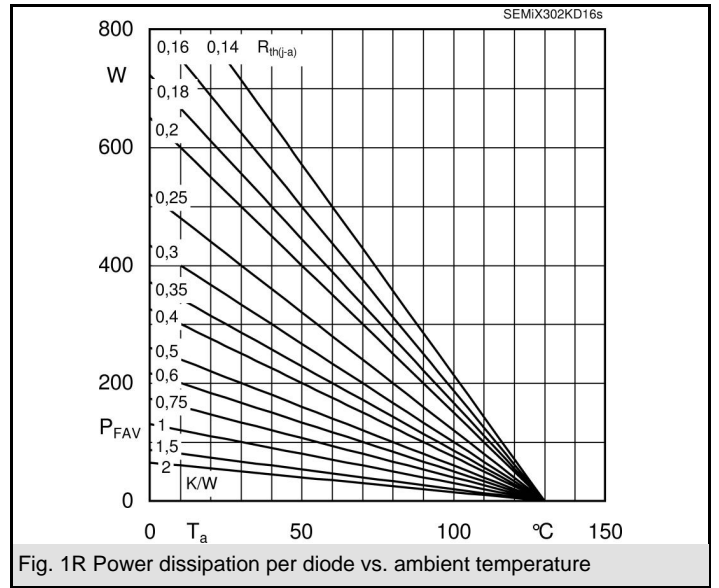
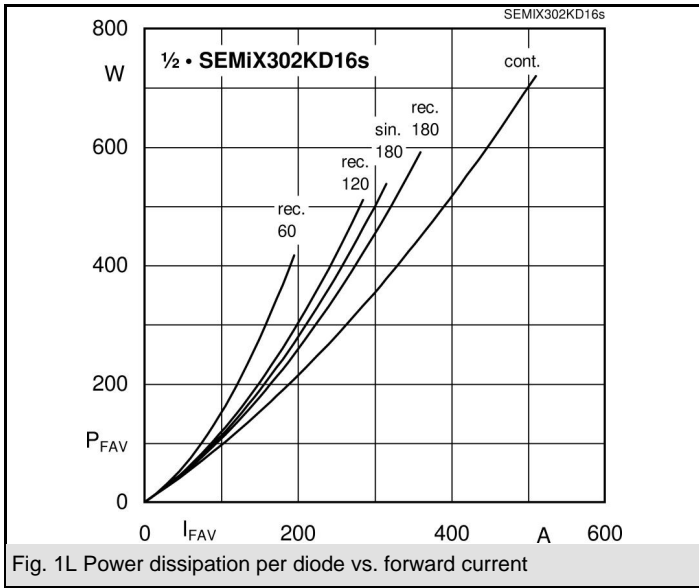
- Input Bridge Rectifier for
- AC/DC motor control
- power supply

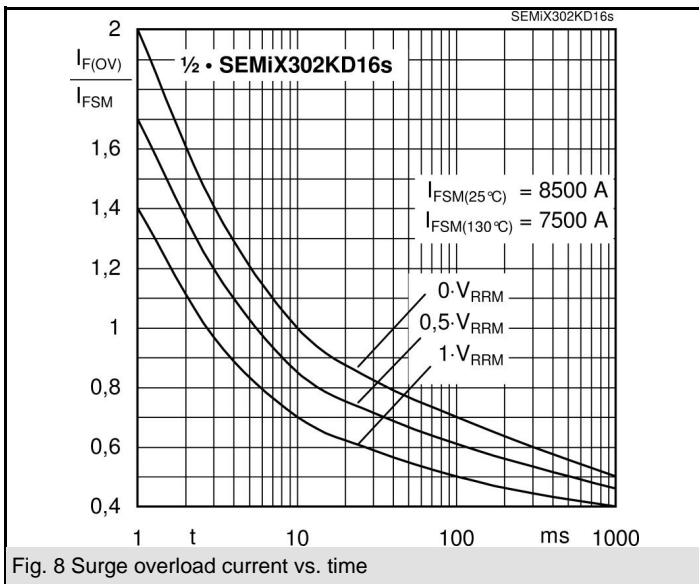
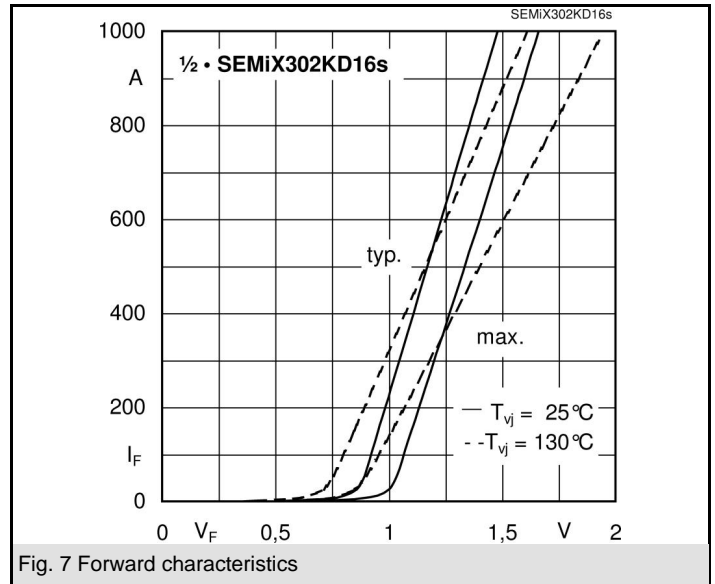
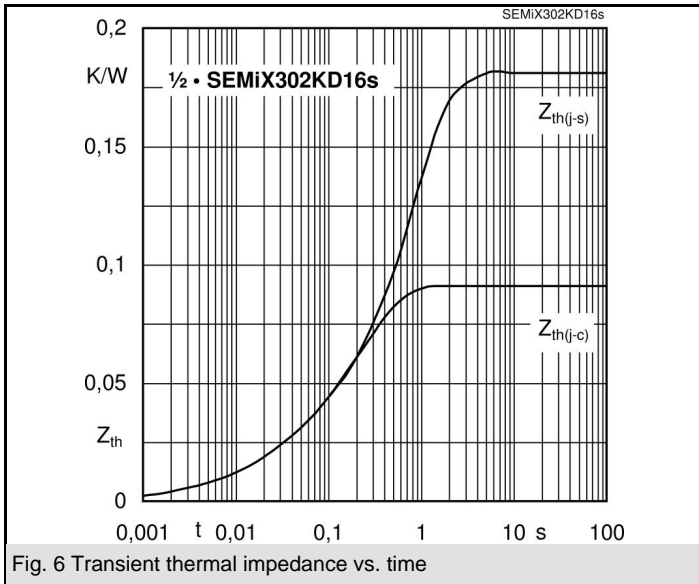
$V_{RSM}$ V	$V_{RRM}$ V	$I_{FRMS} = 510$ A (maximum value for continuous operation) $I_{FAV} = 300$ A (sin. 180; $T_c = 85 = ^\circ\text{C}$ )	
1700	1600	SEMiX 302KD16s	

Symbol	Conditions	Values	Units
$I_{FAV}$	sin. 180; $T_c = 85$ (100) $^\circ\text{C}$	300 (240)	A
$I_{FSM}$	$T_{vj} = 25$ $^\circ\text{C}$ ; 10 ms	8500	A
	$T_{vj} = 130$ $^\circ\text{C}$ ; 10 ms	7500	A
$i^2t$	$T_{vj} = 25$ $^\circ\text{C}$ ; 8,3 ... 10 ms	361000	$\text{A}^2\text{s}$
	$T_{vj} = 130$ $^\circ\text{C}$ ; 8,3 ... 10 ms	281000	$\text{A}^2\text{s}$
$V_F$	$T_{vj} = 25$ $^\circ\text{C}$ ; $I_F = 900$ A	max. 1,6	V
$V_{(TO)}$	$T_{vj} = 130$ $^\circ\text{C}$	max. 0,85	V
$r_T$	$T_{vj} = 130$ $^\circ\text{C}$	max. 1,1	$\text{m}\Omega$
$I_{RD}$	$T_{vj} = 130$ $^\circ\text{C}$ ; $V_{RD} = V_{RRM}$	max. 15	mA
$R_{th(j-c)}$	per diode	0,091	K/W
$R_{th(c-s)}$	per module	0,045	K/W
$T_{vj}$		- 40 ... + 130	$^\circ\text{C}$
$T_{stg}$		- 40 ... + 125	$^\circ\text{C}$
$V_{isol}$	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	$\text{m/s}^2$
m	approx.	220	g
Case	SEMiX 2s		



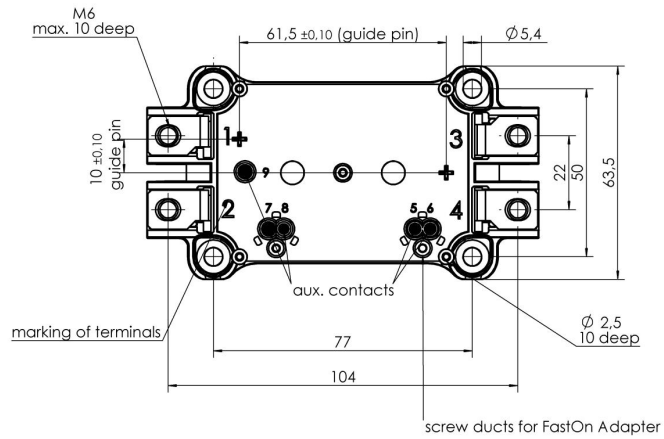
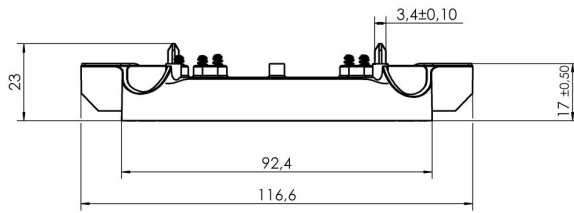
**KD**



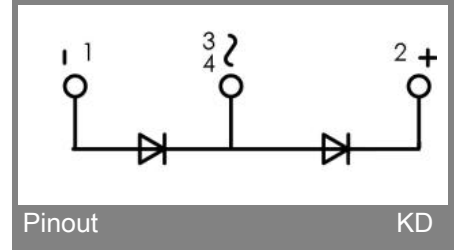


case SEMiX2 rectifier

Dimensions in mm



Case SEMiX2s



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