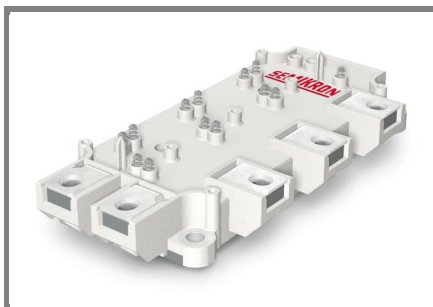


# SEMiX 251D12Fs



**SEMiX® 13s**

## Bridge Rectifier Module (uncontrolled)

### SEMiX 251D12Fs

Preliminary Data

### Features

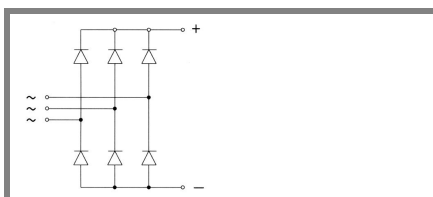
- Terminal height 17 mm
- Chips soldered directly to isolated substrate

### Typical Applications

- Fast Input Bridge Rectifier for
- AC/DC motor control
- power supply
- high frequency applications

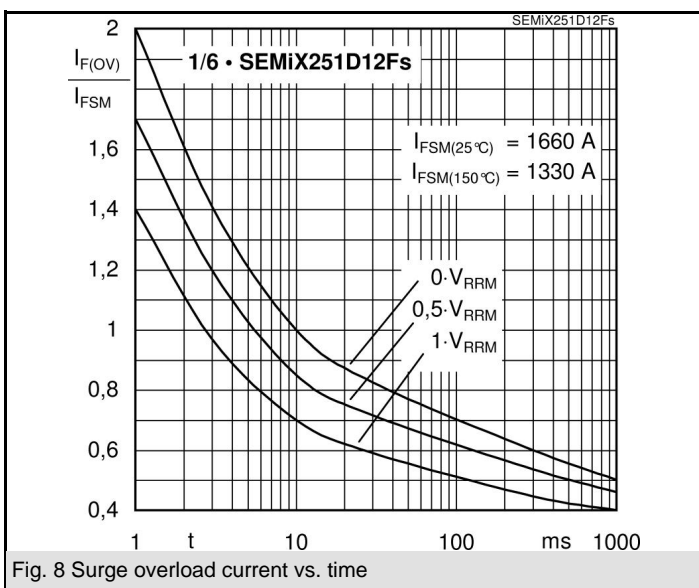
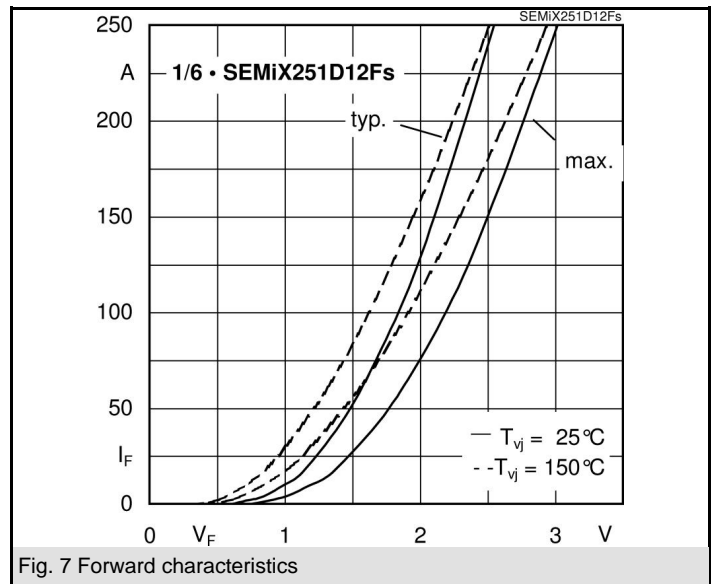
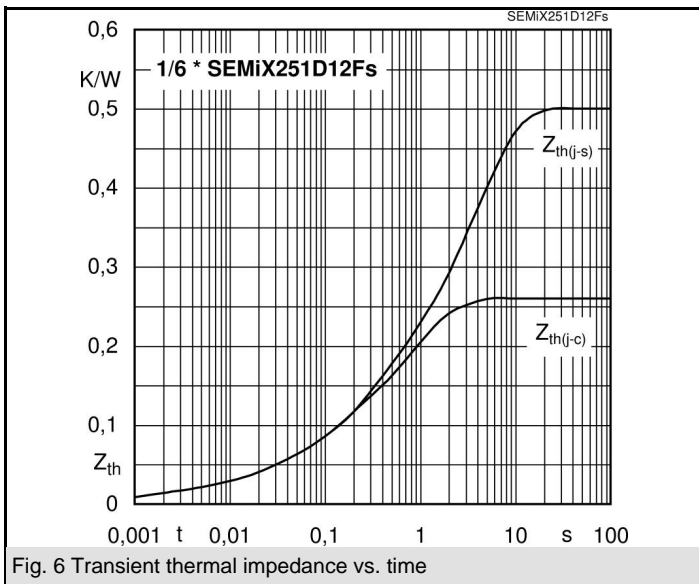
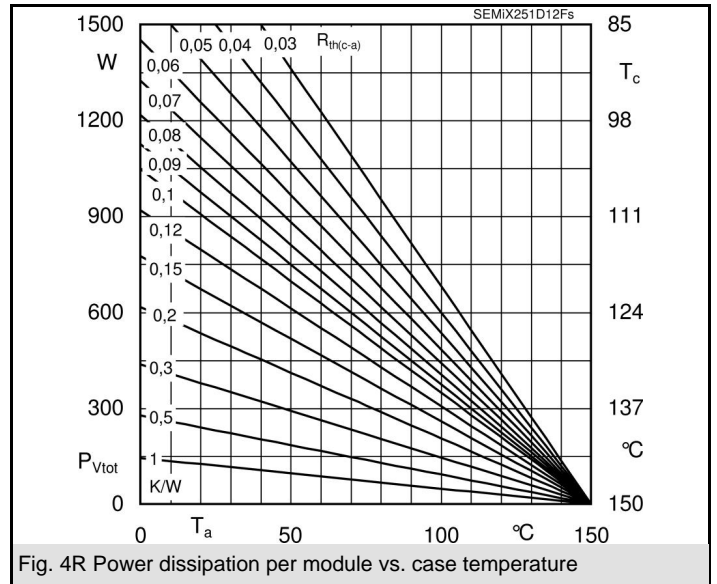
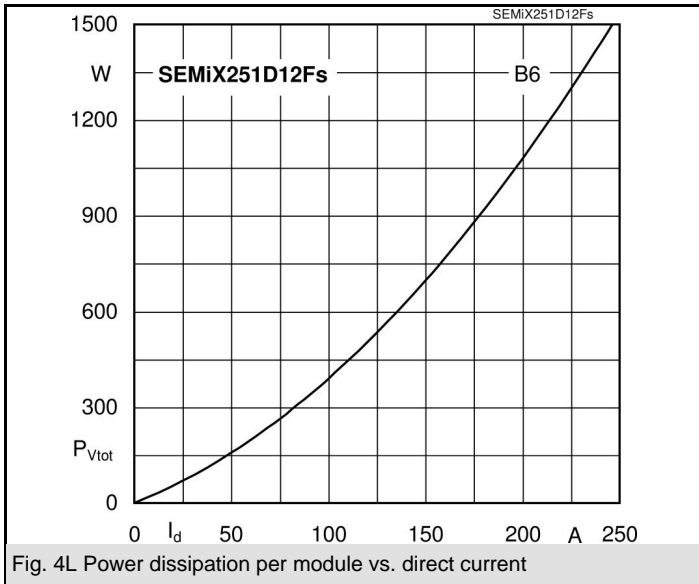
$V_{RSM}$ V	$V_{RRM}, V_{DRM}$ V	$I_D = 250$ A (full conduction) ( $T_c = 85$ °C)
1200	1200	SEMiX 251D12Fs

Symbol	Conditions	Values	Units
$I_D$	$T_c = 85$ °C	250	A
	$T_c = 100$ °C	215	
$I_{FSM}$	$T_{vj} = 25$ °C; 10 ms	1660	A
	$T_{vj} = 150$ °C; 10 ms	1330	A
$i^2t$	$T_{vj} = 25$ °C; 8,3 ... 10 ms	13700	A <sup>2</sup> s
	$T_{vj} = 150$ °C; 8,3 ... 10 ms	8800	A <sup>2</sup> s
$V_F$	$T_{vj} = 25$ °C; $I_F = 150$ A	max. 2,5	V
$V_{(TO)}$	$T_{vj} = 150$ °C	max. 1,2	V
$r_T$	$T_{vj} = 150$ °C	max. 7	mΩ
$I_{RD}$	$T_{vj} = 150$ °C; $V_{DD} = V_{DRM}$ ; $V_{RD} = V_{RRM}$	max. 40	mA
$R_{th(j-c)}$	per diode	0,26	K/W K/W
	per module	0,04	K/W
$T_{vj}$		- 40 ... + 150	°C
$T_{stg}$		- 40 ... + 125	°C
$V_{isol}$	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	4800 ( 4000 )	V
$M_s$	(min./max.)	3/5	Nm
$M_t$	(min./max.)	2,5/5	Nm
a		5 * 9,81	m/s <sup>2</sup>
m		300	g
Case	SEMiX 13s		

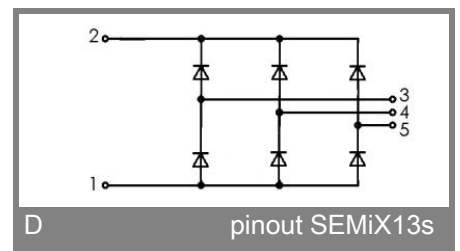
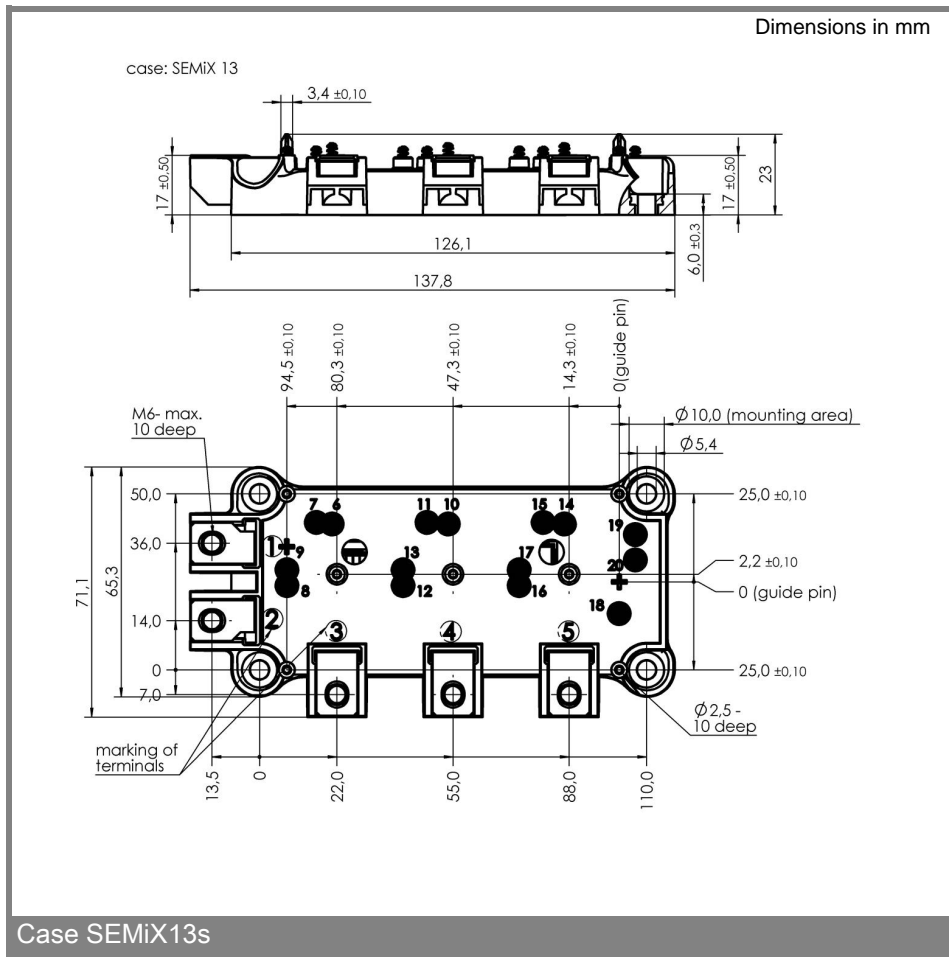


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# SEMiX 251D12Fs



# SEMiX 251D12Fs



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