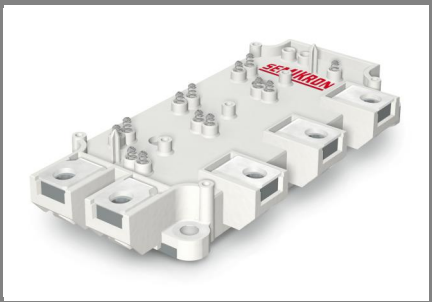


SEMiX 251D12Fs



SEMiX® 13s

Bridge Rectifier Module
(uncontrolled)

SEMiX 251D12Fs

Target Data

Features

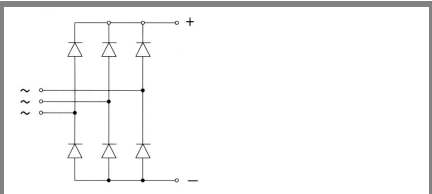
- terminal height of 17mm
- chip solder on direct copper bonded Al₂O₃ ceramic
- heat transfer through Al₂O₃ ceramic isolated baseplate

Typical Applications

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

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

Symbol	Conditions	Values	Units
I_D	$T_c = 85\text{ }^{\circ}\text{C}$	250	A
	$T_c = 100\text{ }^{\circ}\text{C}$	215	
I_{FSM}	$T_{vj} = 25\text{ }^{\circ}\text{C}; 10\text{ ms}$	1660	A
	$T_{vj} = 150\text{ }^{\circ}\text{C}; 10\text{ ms}$	1330	A
i^2t	$T_{vj} = 25\text{ }^{\circ}\text{C}; 8,3 \dots 10\text{ ms}$	13700	A ² s
	$T_{vj} = 150\text{ }^{\circ}\text{C}; 8,3 \dots 10\text{ ms}$	8800	A ² s
V_F	$T_{vj} = 25\text{ }^{\circ}\text{C}; I_F = 150\text{ A}$	max. 2,5	V
$V_{(TO)}$	$T_{vj} = 150\text{ }^{\circ}\text{C}$	max. 1,12	V
r_T	$T_{vj} = 150\text{ }^{\circ}\text{C}$	max. 7,5	mΩ
I_{RD}	$T_{vj} = 150\text{ }^{\circ}\text{C}; V_{DD} = V_{DRM}; V_{RD} = V_{RRM}$	max. 40	mA
$R_{th(j-c)}$	per diode	0,26	K/W K/W
$R_{th(c-s)}$	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 ²
m		300	g
Case	SEMiX 13s		

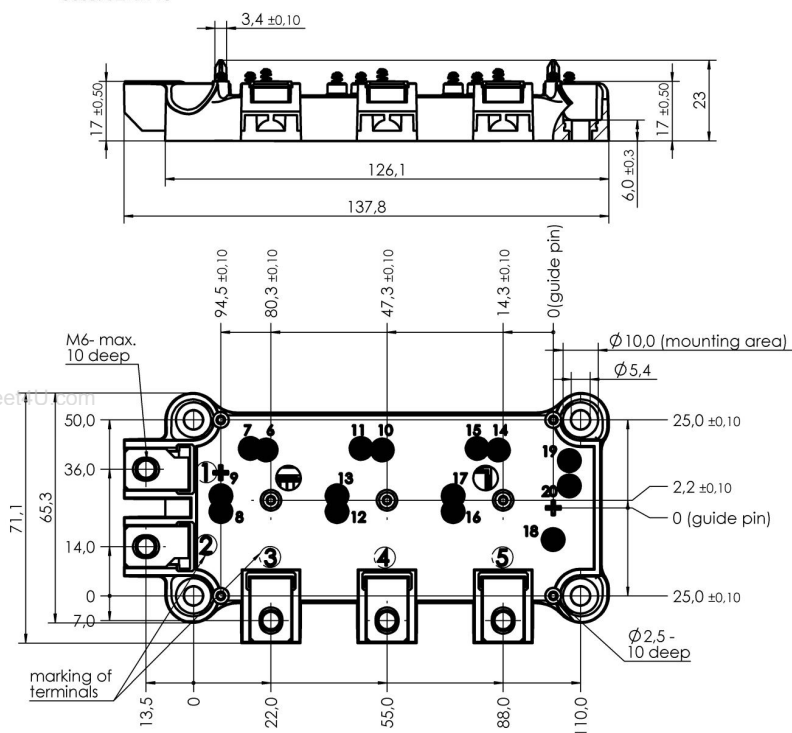


D

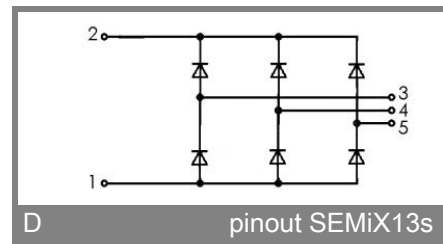
SEMiX 251D12Fs

Dimensions in mm

case: SEMiX 13



Case SEMiX13s



pinout SEMiX13s

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