SEMiX501D17Fs



SEMiX[®] 13

SEMiX501D17Fs

Features

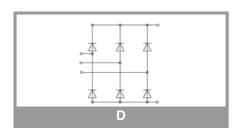
- Terminal height 17 mm
- Chips soldered directly to isolated substrate
- UL recognised file no. E63532

Typical Applications*

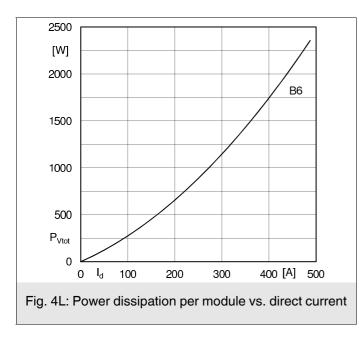
- Fast Input Bridge Rectifier for AC/DC motor control
- Power supply
- High frequency applications

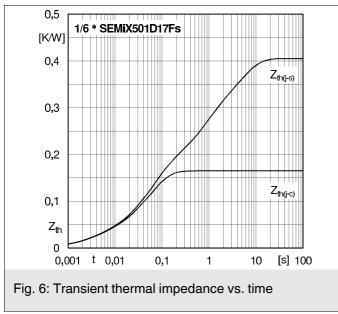
Absolute Maximum Ratings								
Symbol	Conditions		Values	Unit				
Rect. Dio	de							
I _D	T _j = 150 °C sinus 180°	T _c = 85 °C	494	А				
		T _c = 100 °C	417	А				
I _{FSM}	10 ms	T _j = 25 °C	2740	А				
		T _j = 150 °C	2140	А				
i ² t	10 ms	T _j = 25 °C	37538	A ² s				
		T _j = 150 °C	22898	A ² s				
V _{RSM}			1700	V				
V _{RRM}			1700	V				
Tj			-40 150	°C				
Module								
T _{stg}			-40 125	°C				
Visol	AC sinus 50Hz	1 min	4000	V				
		1 s	4800	V				

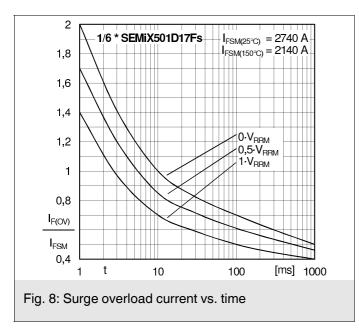
Characte	eristics					
Symbol	Conditions	min.	typ.	max.	Unit	
Rectifier	Diode					
V _F	$T_j = 25 \ ^{\circ}C$, $I_F = 300 \ A$, chiplevel				1.90	V
V _(TO)	T _j = 125 °C, chiplevel				1.10	V
r _T	T _j = 125 °C, chiplevel				2.7	mΩ
I _{RD}	$T_j = 125 \ ^\circ C, \ V_{RD} = V_{RRM}$				14.4	mA
$R_{th(j-c)}$	sin. 180	per diode			0.165	K/W
						K/W
Module	·					
$R_{CC'+EE'}$	measured per switch	T _C = 25 °C		0.7		mΩ
		T _C = 125 °C		1		mΩ
$R_{th(c-s)}$	per chip					K/W
	per module			0.04		K/W
Ms	to heat sink (M5)		3		5	Nm
Mt	to terminals (M6)		2.5		5	Nm
а					5 * 9,81	m/s²
w					350	g
Temperat	ture Sensor					•
R ₁₀₀	T _c =100°C (R ₂₅ =5 kΩ)			493 ± 5%		Ω
B _{100/125}	R _(T) =R ₁₀₀ exp[B ₁₀₀		3550 ±2%		к	

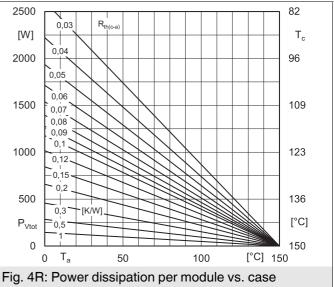


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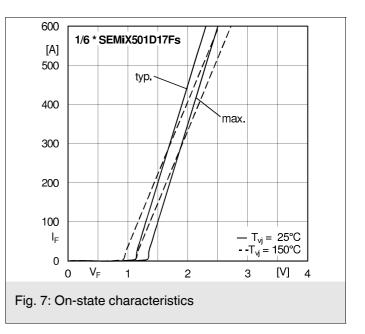




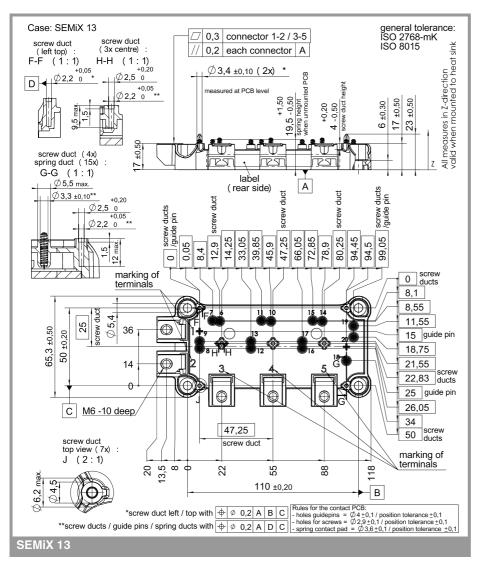


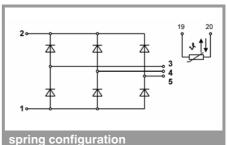






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This is an electrostatic discharge sensitive device (ESDS), international standard IEC 60747-1, chapter IX.