



PST TS110/16

THREE-PHASE RECTIFIER BRIDGE MODULE

Features

- Blocking Capability up to 1600 V
- Electrically Insulated base-plate
- Rugged plastic packaging

Typical applications

- Power supplies
- Battery chargers
- DC motor field supplies

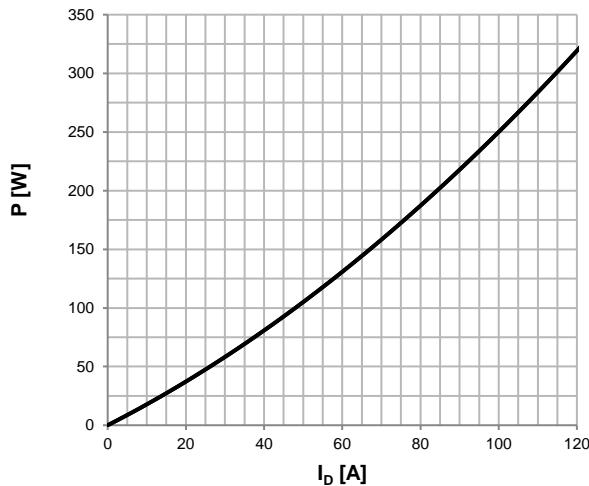
ELECTRICAL CHARACTERISTICS AND RATINGS

Parameter	Symbol	Min	Max	Typ	Unit	Conditions
Rectified bridge output current	I_D		151		A	$T_c = 85^\circ C$
Repetitive peak reverse voltage	V_{RRM}		1600		V	$T_j = -40^\circ C \text{ to } 150^\circ C$
Non repetitive peak reverse voltage	V_{RSM}		1700		V	$T_j = -40^\circ C \text{ to } 150^\circ C$
Repetitive peak reverse current	I_{RRM}		5		mA	$T_j = T_{jmax}, V = V_{RRM}$
Peak one cycle surge (non repetitive) current	I_{FSM}		1.0		kA	50 Hz sinewave, 180° conduction, $T_j = T_{jmax}, V_R = 0$
$I^2 t$	$I^2 t$		5.0		kA ² s	$T_j = T_{jmax}$
Peak forward voltage	V_{FM}		2.05		V	Forward current 300 A, $T_j = T_{jmax}$
Threshold voltage	$V_{F(TO)}$		0.85		V	$T_j = T_{jmax}$
Forward slope resistance	r_F		4.00		mΩ	$T_j = T_{jmax}$
Thermal resistance junction to case per module	$R_{th(j-c)}$		0.15		°C/W	mounting surfaces smooth, flat and greased
Thermal resistance case to sink per module	$R_{th(c-s)}$		0.03		°C/W	
Insulating voltage	V_{INS}		3600		V	50 Hz, RMS, $t = 1 s$
Insulating voltage	V_{INS}		3000		V	50 Hz, RMS, $t = 60 s$
Operating junction temperature	T_j	-40	150		°C	
Storage temperature	T_{stg}	-40	125		°C	
Mounting torque case-heatsink	T		5		N·m	
Mounting torque busbar-terminals	T		5		N·m	
Weight	W			270	g	

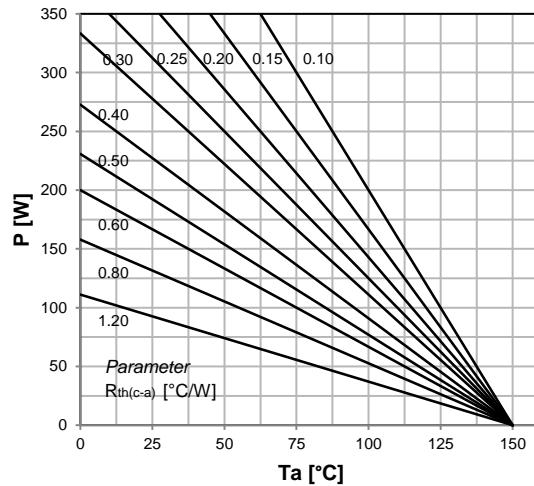
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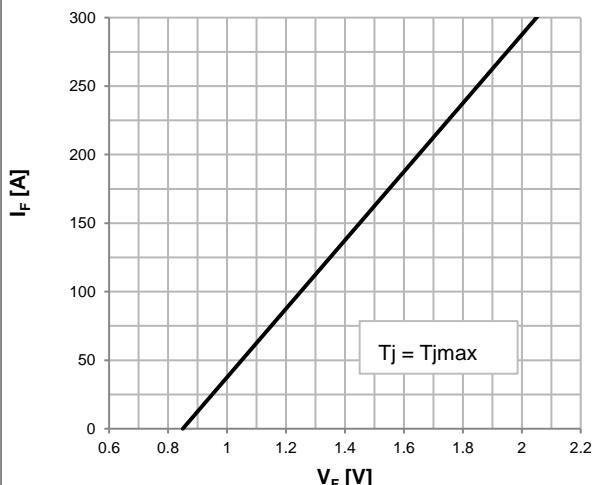
Power dissipation vs output current



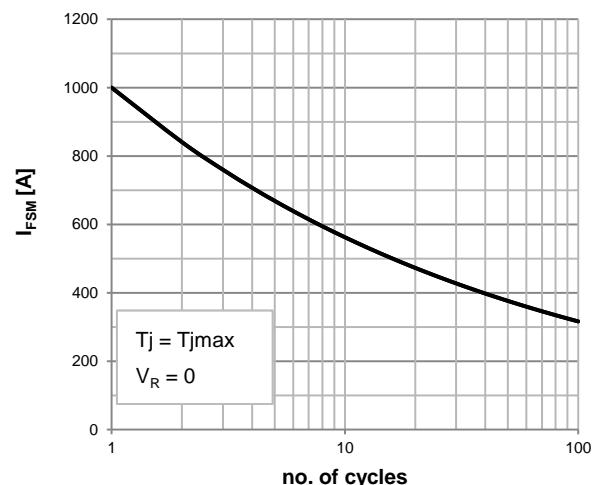
Power dissipation vs ambient temperature



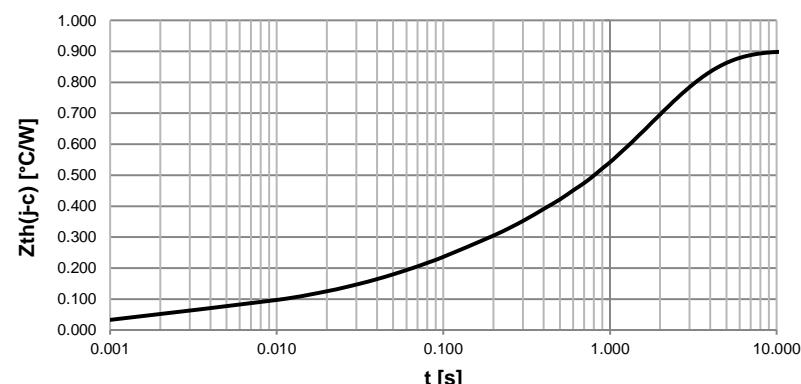
Forward characteristic

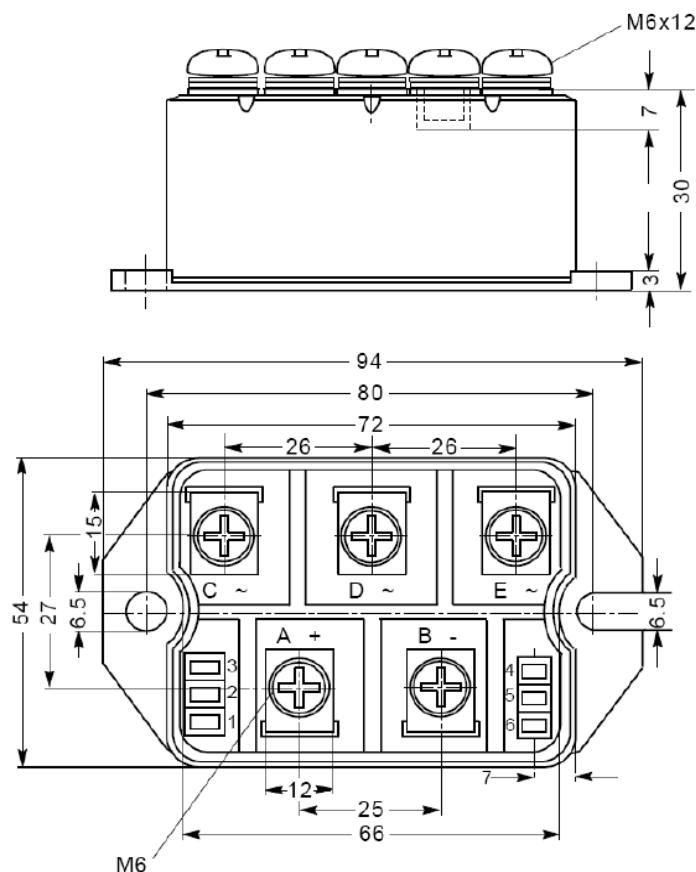


Surge current vs number of cycles



Thermal impedance junction to case - per diode



OUTLINE AND DIMENSIONS


dimensions in mm

