



## PST TS30

### THREE-PHASE RECTIFIER BRIDGE MODULE

#### Features

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

#### Typical applications

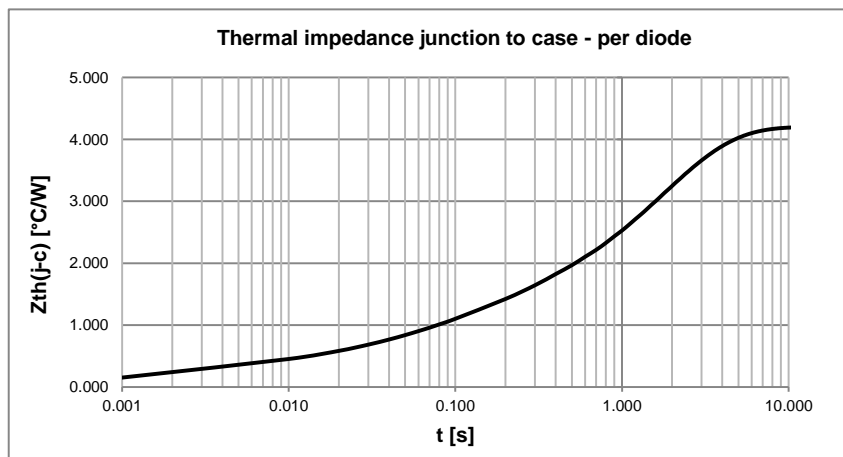
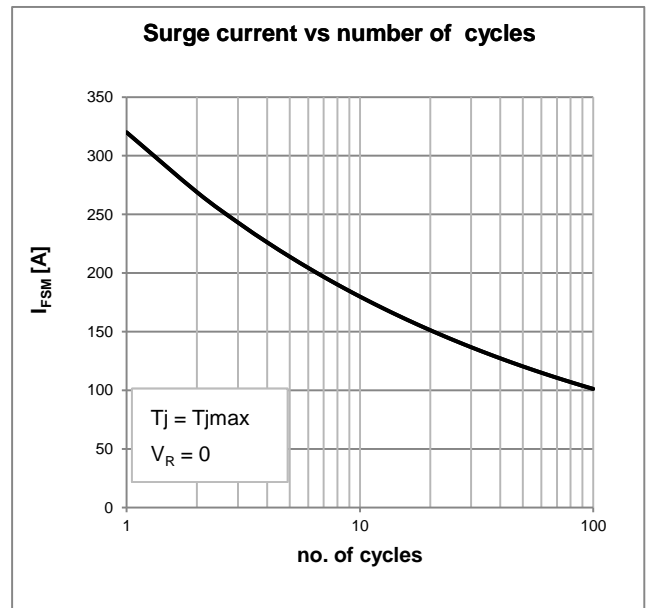
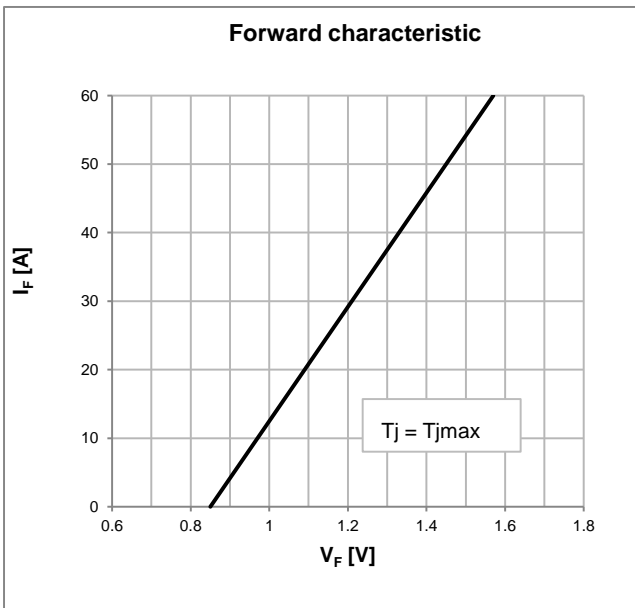
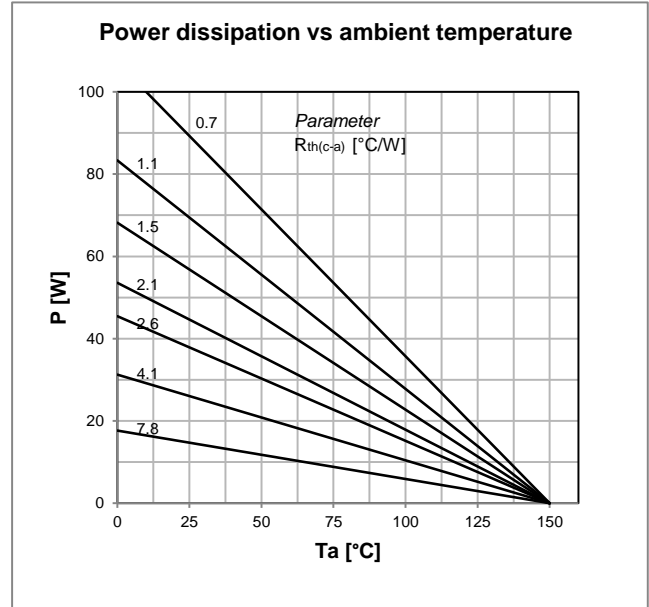
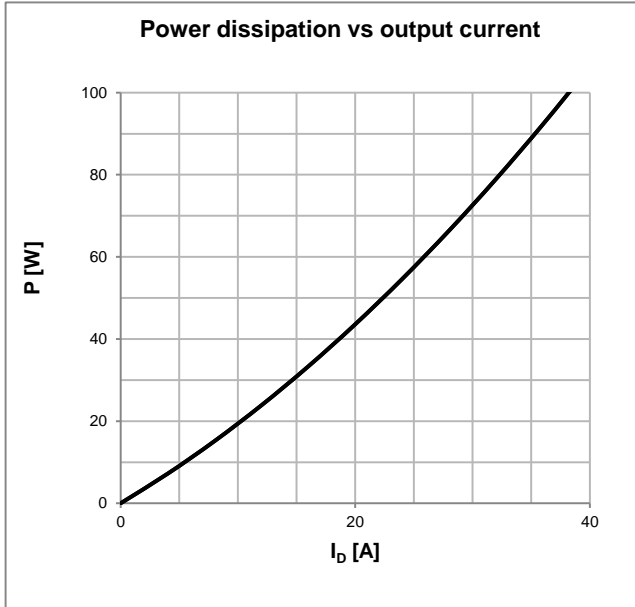
- Power supplies
- Battery chargers
- DC motor field supplies

#### ELECTRICAL CHARACTERISTICS AND RATINGS

Parameter	Symbol	Min	Max	Typ	Unit	Conditions
Rectified bridge output current	$I_D$		30		A	$T_c = 98\text{ }^\circ\text{C}$
Repetitive peak reverse voltage	$V_{RRM}$		1200		V	$T_j = -40\text{ }^\circ\text{C}$ to $150\text{ }^\circ\text{C}$
Non repetitive peak reverse voltage	$V_{RSM}$		1300		V	$T_j = -40\text{ }^\circ\text{C}$ to $150\text{ }^\circ\text{C}$
Repetitive peak reverse current	$I_{RRM}$		5		mA	$T_j = T_{jmax}$ , $V = V_{RRM}$
Peak one cycle surge (non repetitive) current	$I_{FSM}$		0.32		kA	50 Hz sinewave, $180^\circ$ conduction, $T_j = T_{jmax}$ , $VR = 0$
I square t	$I^2 t$		0.5		$\text{kA}^2\text{s}$	$T_j = T_{jmax}$
Peak forward voltage	$V_{FM}$		2.1		V	Forward current 100 A, $T_j = T_{jmax}$
Threshold voltage	$V_{F(TO)}$		0.85		V	$T_j = T_{jmax}$
Forward slope resistance	$r_F$		12.0		$\text{m}\Omega$	$T_j = T_{jmax}$
Thermal resistance junction to case per module	$R_{th(j-c)}$		0.700		$^\circ\text{C}/\text{W}$	mounting surfaces smooth, flat and greased
Thermal resistance case to sink per module	$R_{th(c-s)}$		0.10		$^\circ\text{C}/\text{W}$	
Insulating voltage	$V_{INS}$		3000		V	50 Hz, RMS, $t = 1\text{ s}$
Insulating voltage	$V_{INS}$		2500		V	50 Hz, RMS, $t = 60\text{ s}$
Operating junction temperature	$T_j$	-40	150		$^\circ\text{C}$	
Storage temperature	$T_{stg}$	-40	150		$^\circ\text{C}$	
Mounting torque case-heatsink	$T$	4.5	5.5		N-m	
Mounting torque busbar-terminals	$T$	1.3	1.7		N-m	
Weight	$W$			130	g	

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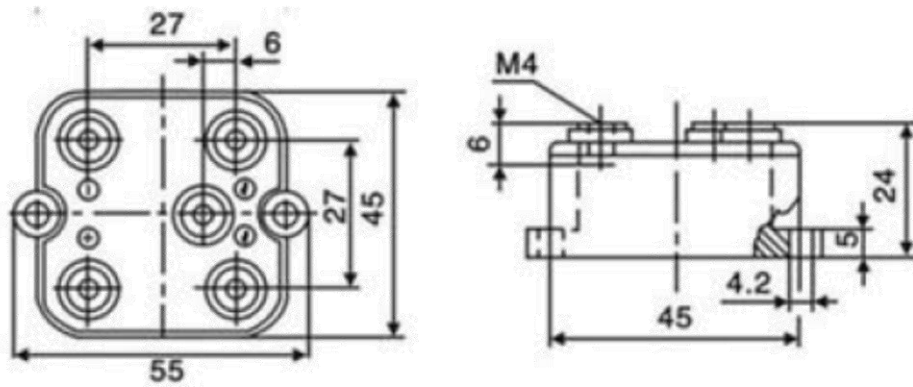
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### OUTLINE AND DIMENSIONS



( all dimensions in mm )

