



## PST TS82/16

### THREE-PHASE RECTIFIER BRIDGE MODULE

#### Features

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

#### Typical applications

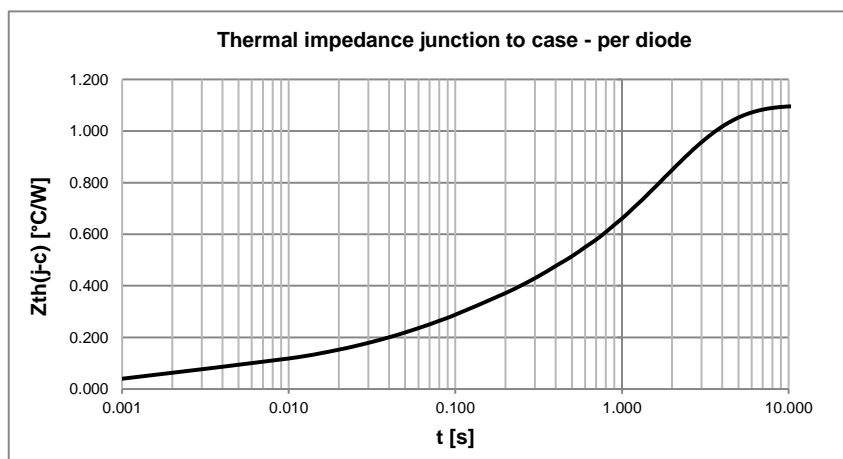
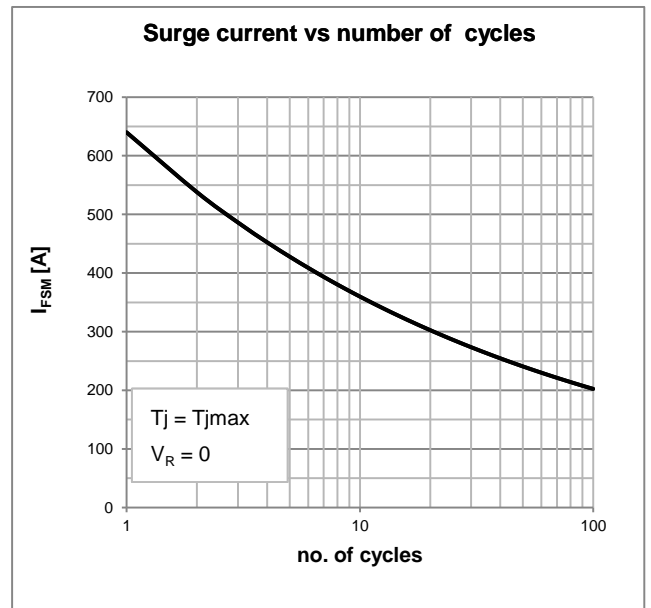
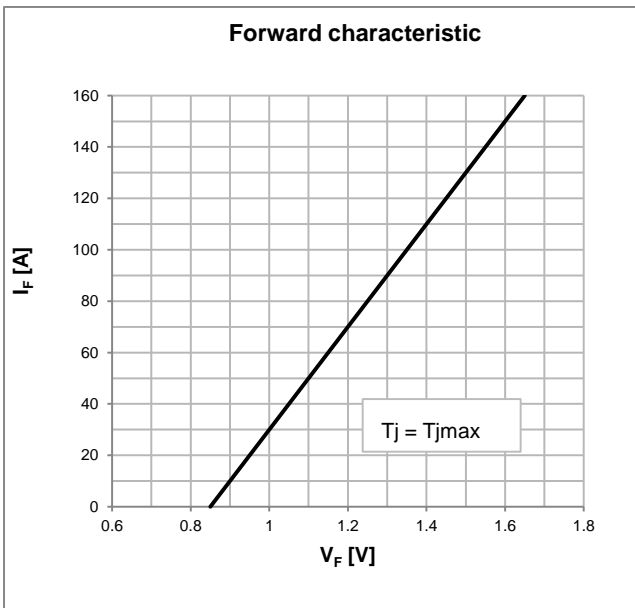
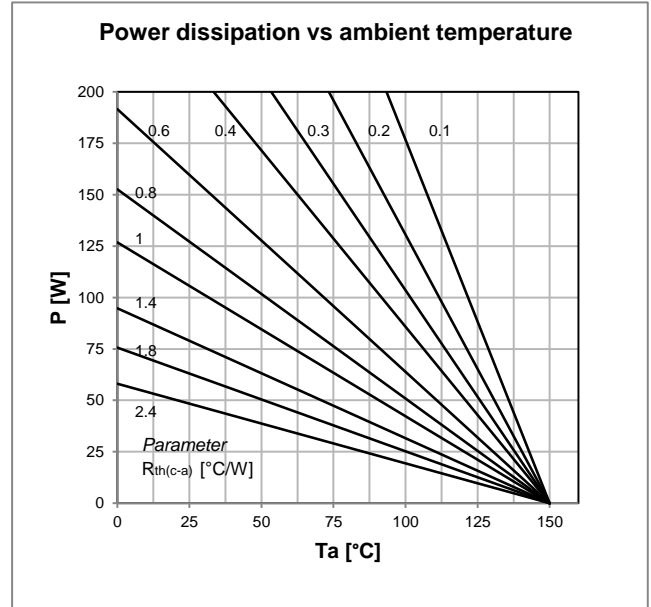
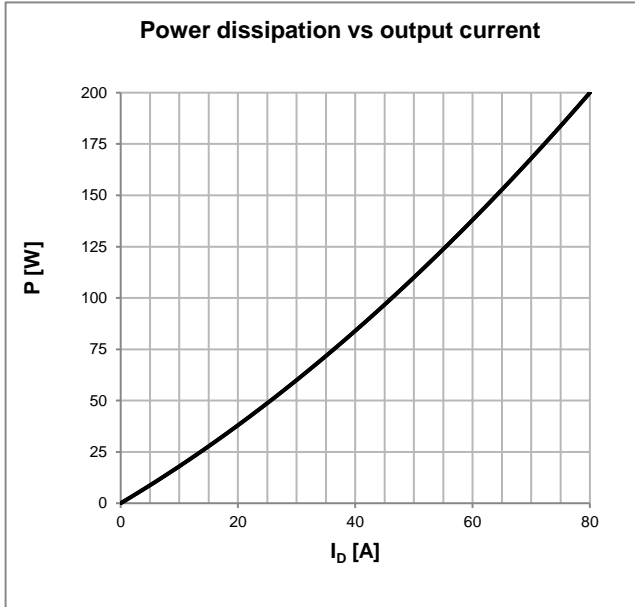
- Power supplies
- Battery chargers
- DC motor field supplies

#### ELECTRICAL CHARACTERISTICS AND RATINGS

Parameter	Symbol	Min	Max	Typ	Unit	Conditions
Rectified bridge output current	$I_D$		80		A	$T_c = 110\text{ }^\circ\text{C}$
Repetitive peak reverse voltage	$V_{RRM}$		1600		V	$T_j = -40\text{ }^\circ\text{C}$ to $150\text{ }^\circ\text{C}$
Non repetitive peak reverse voltage	$V_{RSM}$		1700		V	$T_j = -40\text{ }^\circ\text{C}$ to $150\text{ }^\circ\text{C}$
Repetitive peak reverse current	$I_{RRM}$		6		mA	$T_j = T_{jmax}$ , $V = V_{RRM}$
Peak one cycle surge (non repetitive) current	$I_{FSM}$		0.64		kA	50 Hz sinewave, $180^\circ$ conduction, $T_j = T_{jmax}$ , $VR = 0$
I square t	$I^2 t$		2.0		$\text{kA}^2\text{s}$	$T_j = T_{jmax}$
Peak forward voltage	$V_{FM}$		1.60		V	Forward current 150 A, $T_j = T_{jmax}$
Threshold voltage	$V_{F(TO)}$		0.85		V	$T_j = T_{jmax}$
Forward slope resistance	$r_F$		5.00		$\text{m}\Omega$	$T_j = T_{jmax}$
Thermal resistance junction to case per module	$R_{th(j-c)}$		0.183		$^\circ\text{C/W}$	mounting surfaces smooth, flat and greased
Thermal resistance case to sink per module	$R_{th(c-s)}$		0.07		$^\circ\text{C/W}$	
Insulating voltage	$V_{INS}$		3600		V	50 Hz, RMS, $t = 1\text{ s}$
Insulating voltage	$V_{INS}$		3000		V	50 Hz, RMS, $t = 60\text{ s}$
Operating junction temperature	$T_j$	-40	150		$^\circ\text{C}$	
Storage temperature	$T_{stg}$	-40	125		$^\circ\text{C}$	
Mounting torque case-heatsink	$T$		5		N-m	
Mounting torque busbar-terminals	$T$		5		N-m	
Weight	$W$			165	g	

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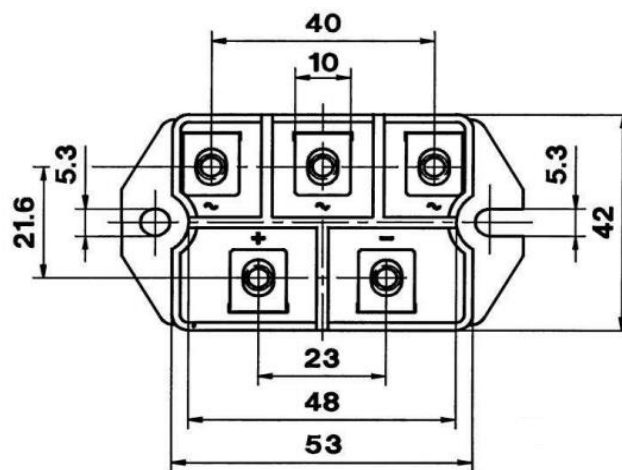
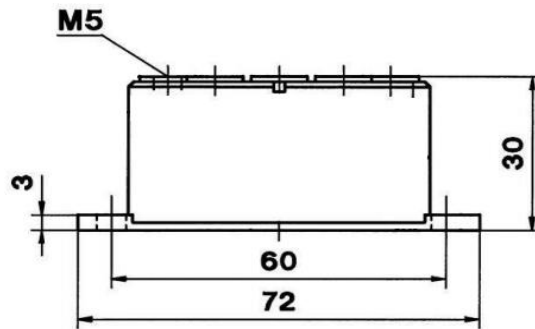
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### OUTLINE AND DIMENSIONS



dimensions in mm

