

S30VTA160

1600V 30A

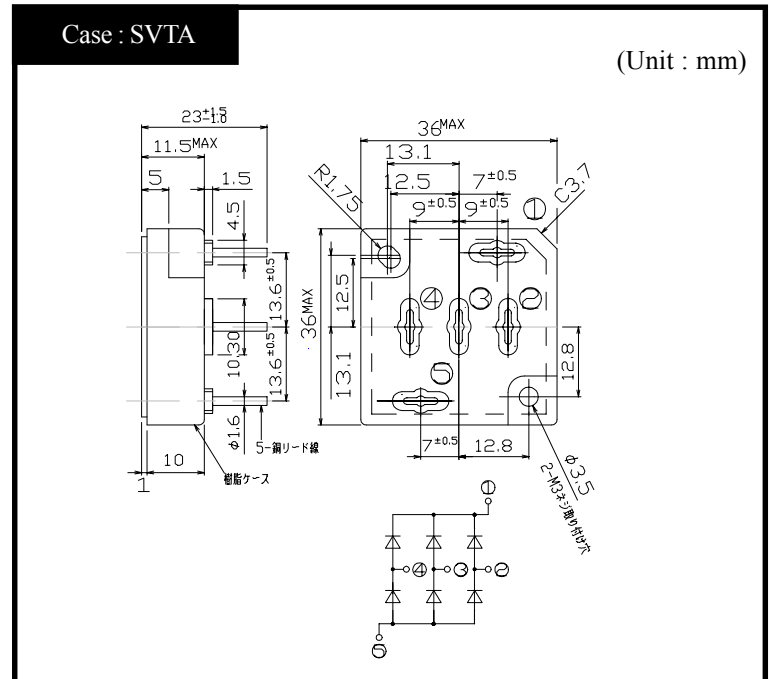
FEATURES

- Dual In-Line Package
- Compact 3 phase bridge
- High IFSM
- Applicable to mount on glass-epoxy substrate

APPLICATION

- Big Power Supply
- Air conditioner
- Factory Automation, Inverter

OUTLINE DIMENSIONS



RATINGS

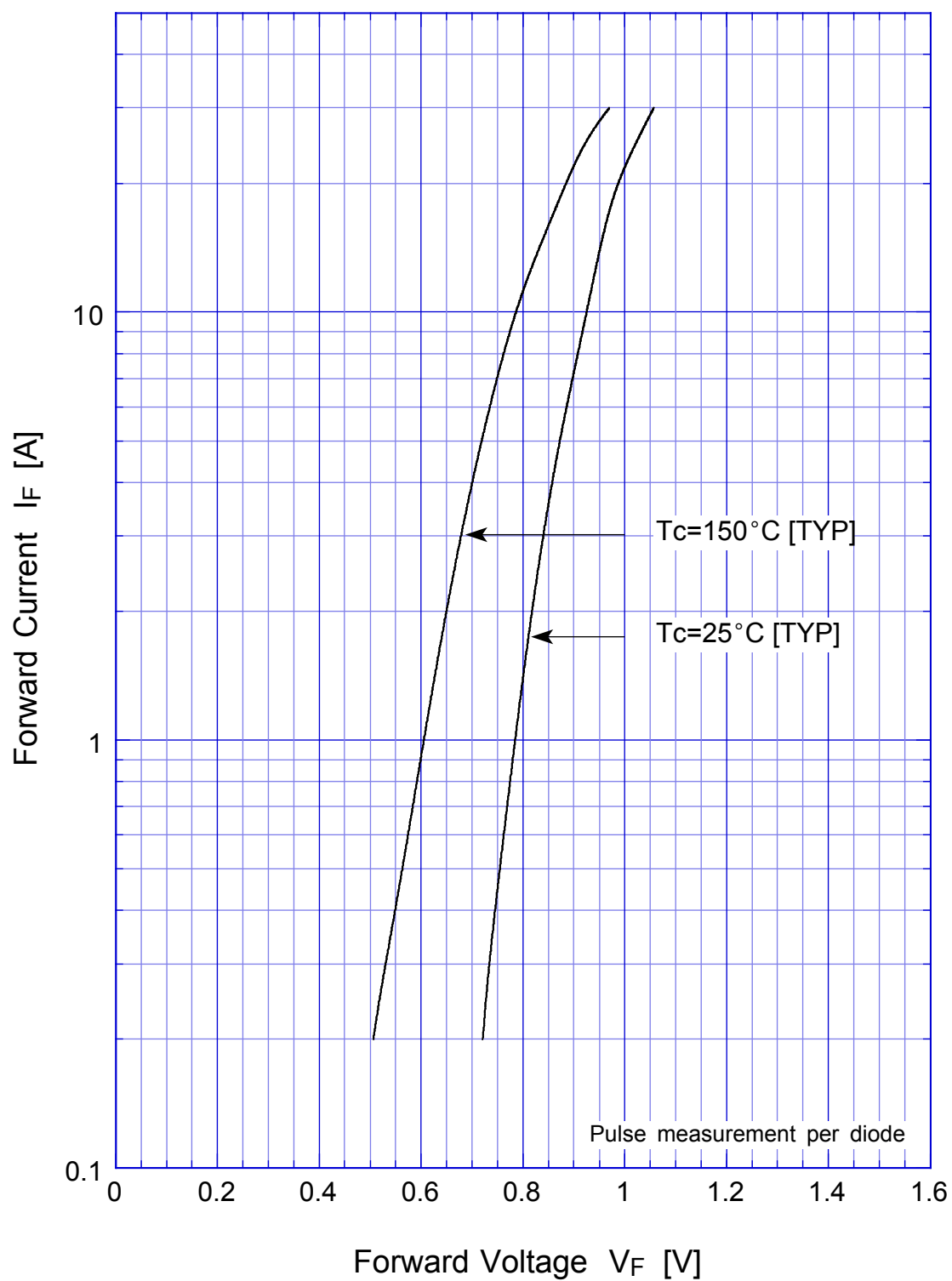
- Absolute Maximum Ratings (If not specified $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40~150	$^\circ\text{C}$
Operating Junction Temperature	T_j		150	$^\circ\text{C}$
Maximum Reverse Voltage	V_{RM}		1600	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load With heatsink $T_c=116^\circ\text{C}$	30	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per diode $T_j=25^\circ\text{C}$	350	A
Current Squared Time	I^2t	$1\text{ms} \leq t < 10\text{ms}$ $T_c=25^\circ\text{C}$	200	A^2s
Dielectric Strength	V_{dis}	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque : $0.6\text{N}\cdot\text{m}$)	0.8	$\text{N}\cdot\text{m}$

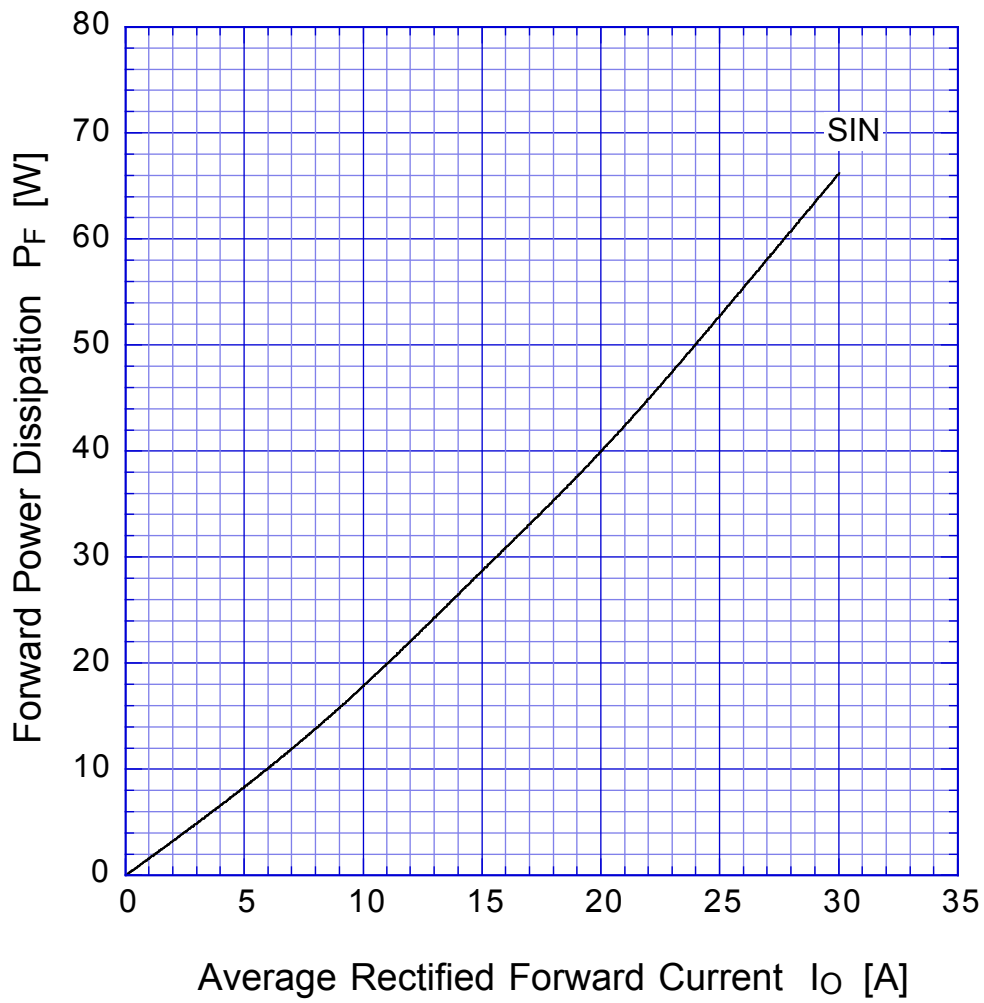
- Electrical Characteristics (If not specified $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=10\text{A}$, Pulse measurement, Rating of per diode	Max.1.05	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement, Rating of per diode	Max.100	μA
Thermal Resistance	θ_{jc}	junction to case	Max.0.5	$^\circ\text{C}/\text{W}$

S30VTA160 Forward Voltage



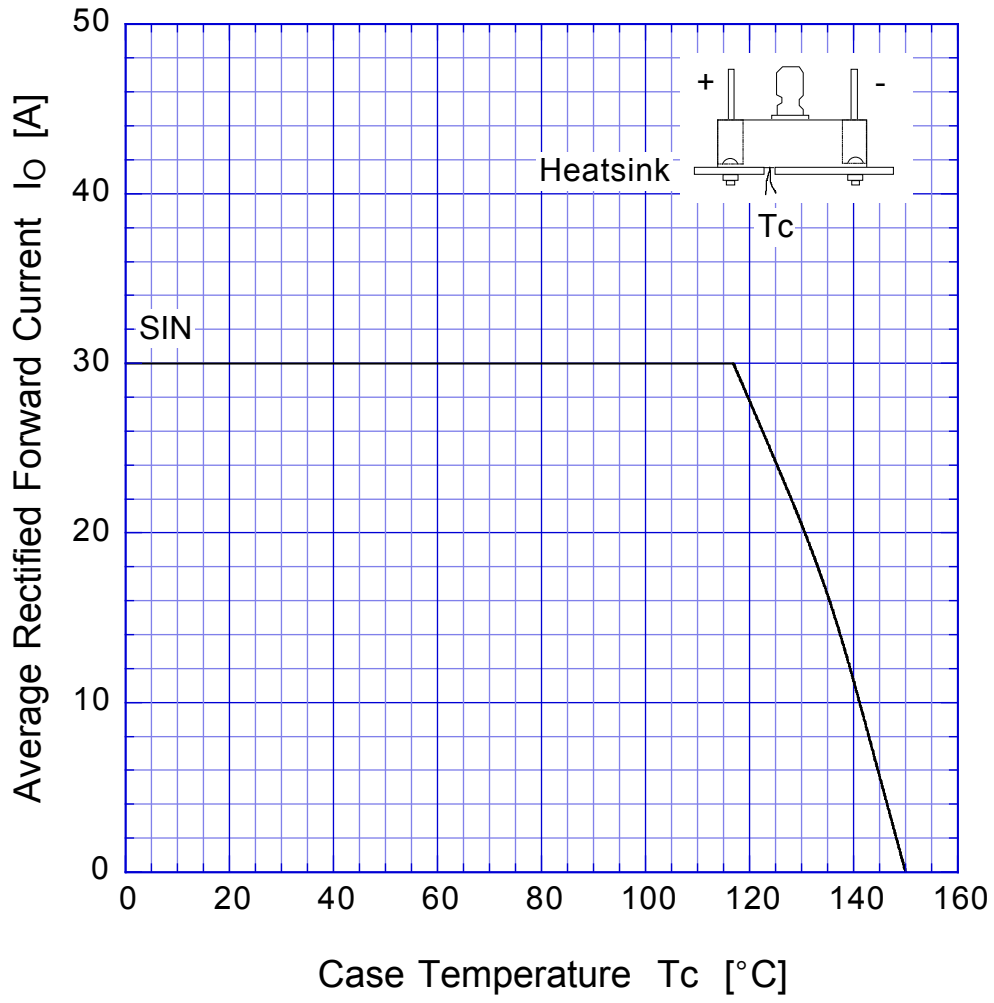
S30VTA160 Forward Power Dissipation



$T_j = 150^\circ\text{C}$
Sine wave

S30VTA160

Derating Curve



S30VTA160 Peak Surge Forward Capability

