

SHINDENGEN

3 Phase Bridge Diode

Diode Module

S10VT60

600V 10A

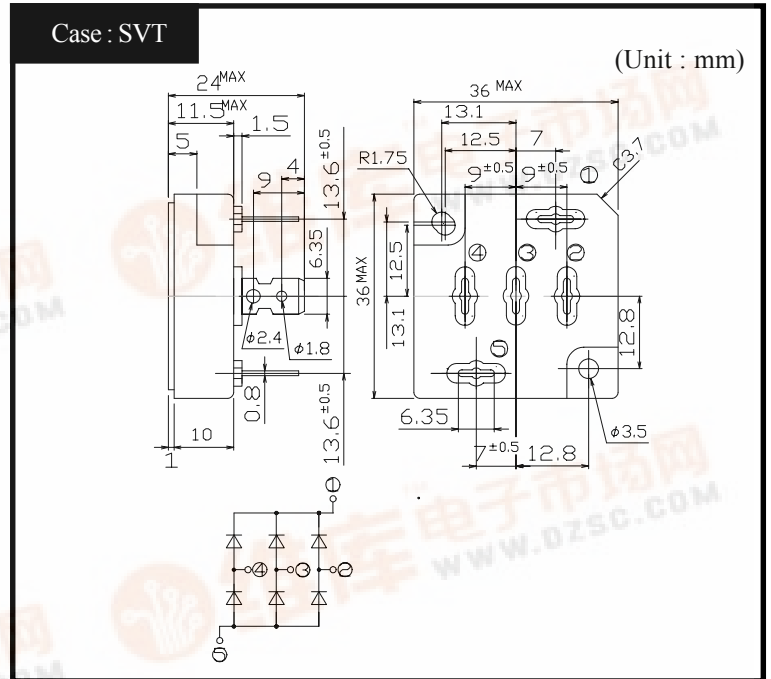
FEATURES

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

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}		600	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, With heatsink, $T_c=137^\circ\text{C}$	10	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per diode, $T_j=25^\circ\text{C}$	170	A
Current Squared Time	I^2t	$1\text{ms} \leq t < 10\text{ms}$ $T_c=25^\circ\text{C}$	110	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	$\text{N}\cdot\text{m}$

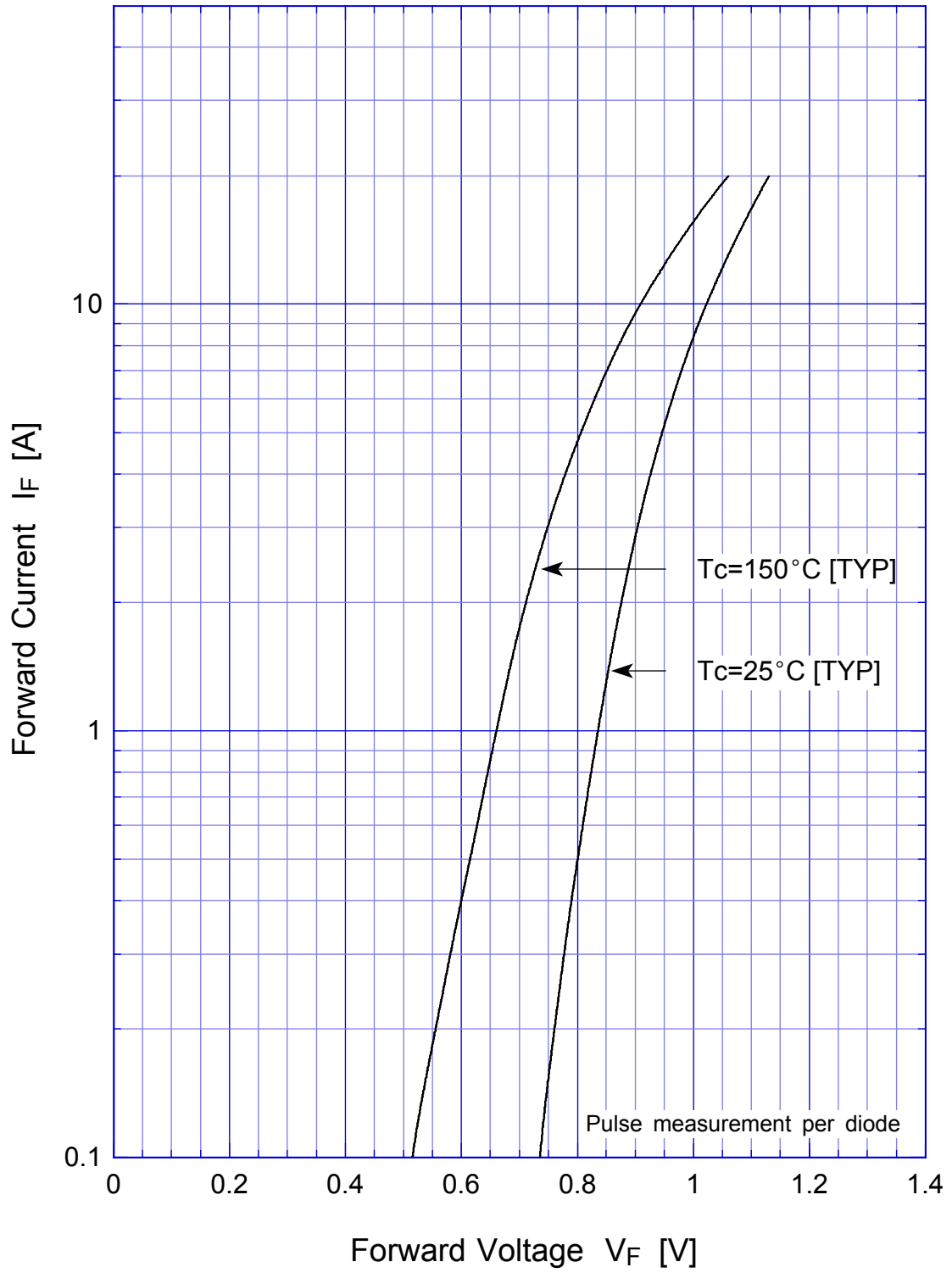
- Electrical Characteristics (If not specified $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=3.5\text{A}$, 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.10	μA
Thermal Resistance	θ_{jc}	junction to case	Max.0.65	$^\circ\text{C}/\text{W}$



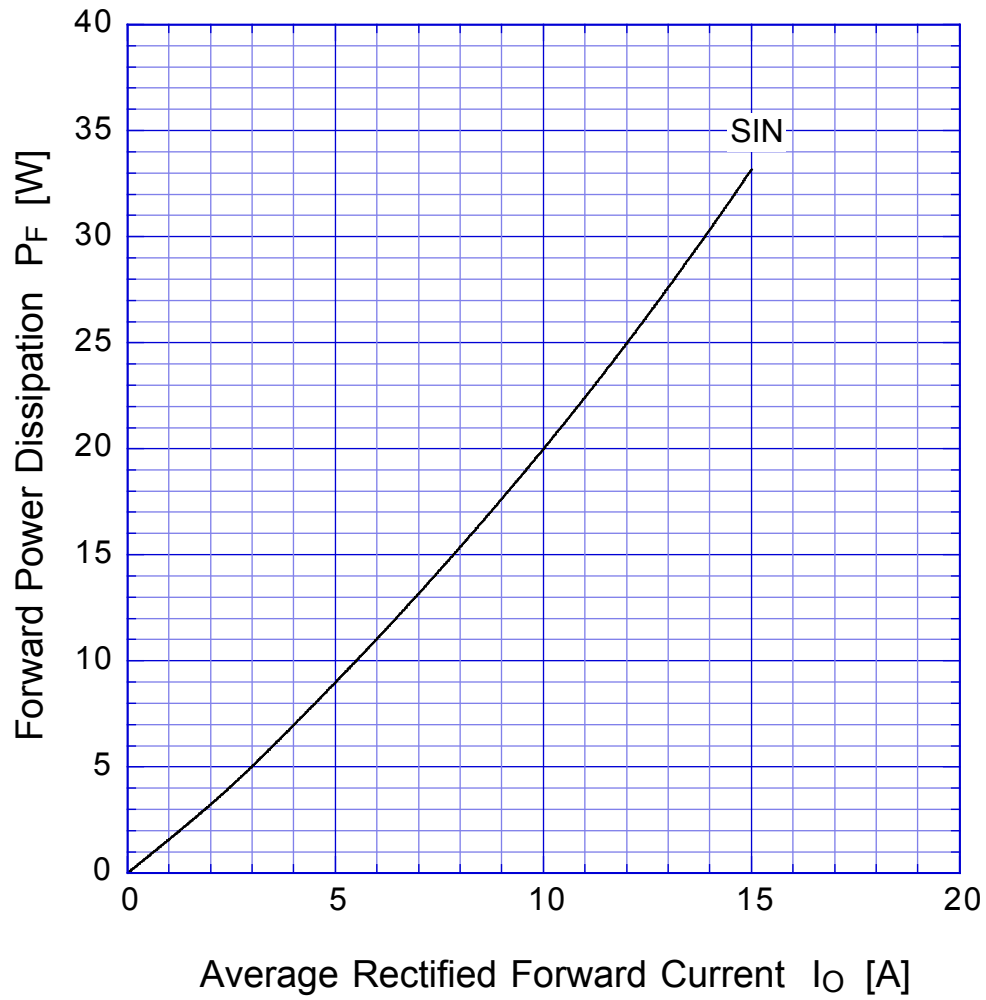
S10VTx

Forward Voltage



S10VTx

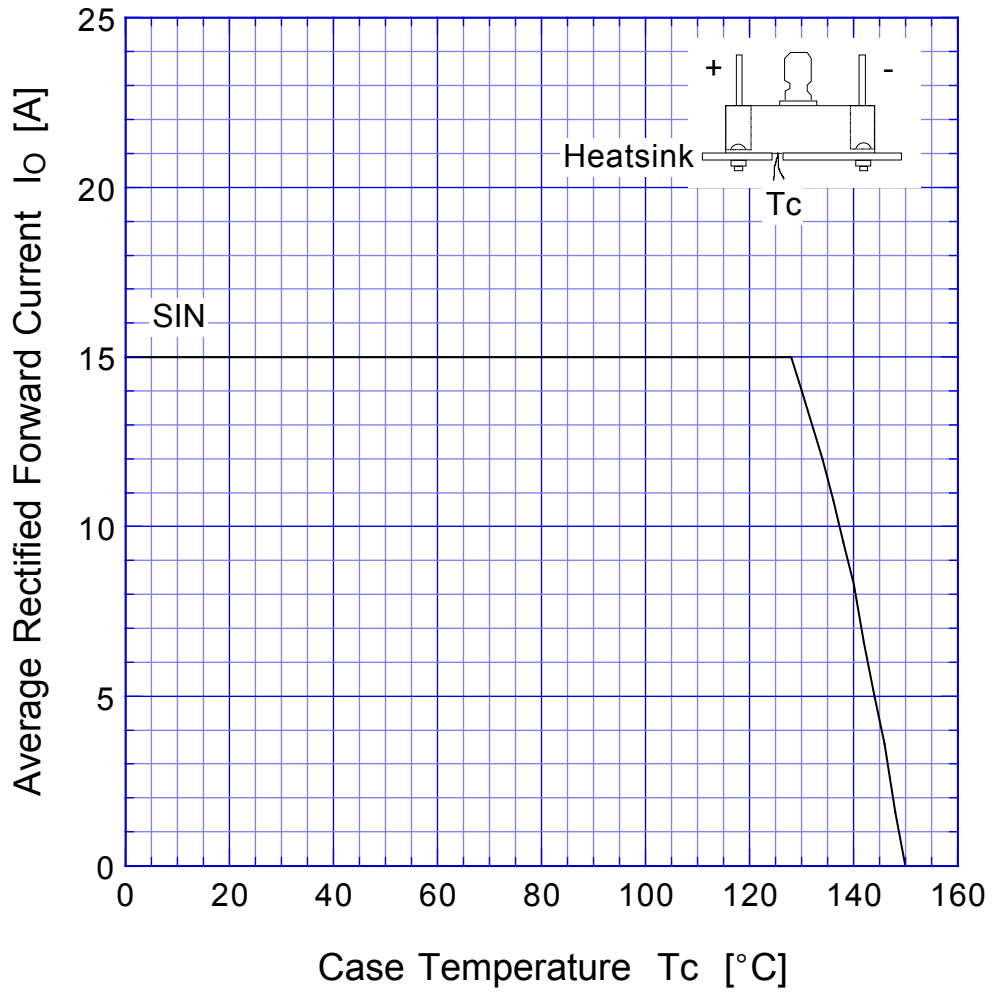
Forward Power Dissipation



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

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Derating Curve



$V_R = V_{RM}$
Sine wave
R-load
with heatsink

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Peak Surge Forward Capability

