

SHINDENGEN

3 Phase Bridge Diode

Diode Module

S30VT80

800V 30A

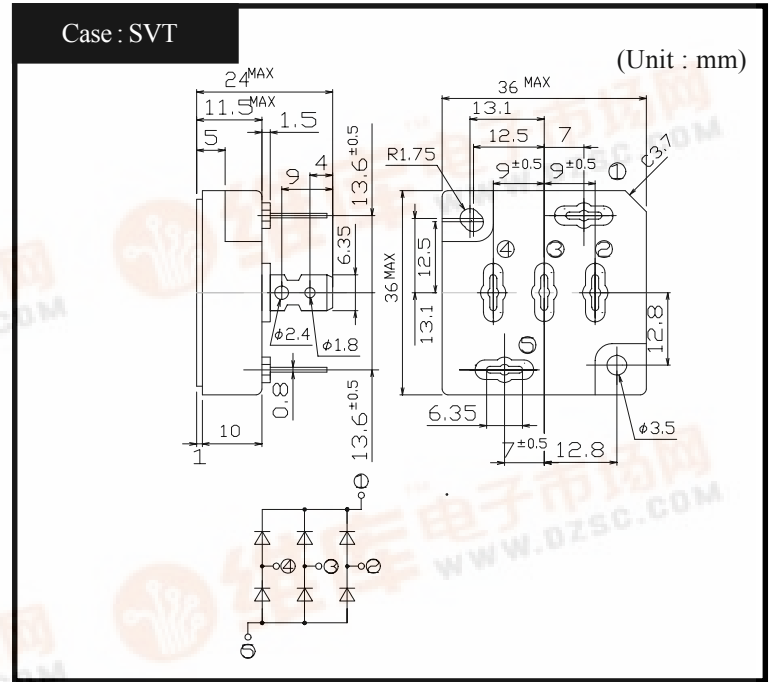
FEATURES

- 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 Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	V _{RM}		800	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load, With heatsink, Tc=121°C	30	A
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per diode, Tj=25°C	400	A
Current Squared Time	I ² t	1ms ≤ t < 10ms Tc=25°C	800	A ² s
Dielectric Strength	Vdis	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque : 0.6N·m)	0.8	N·m

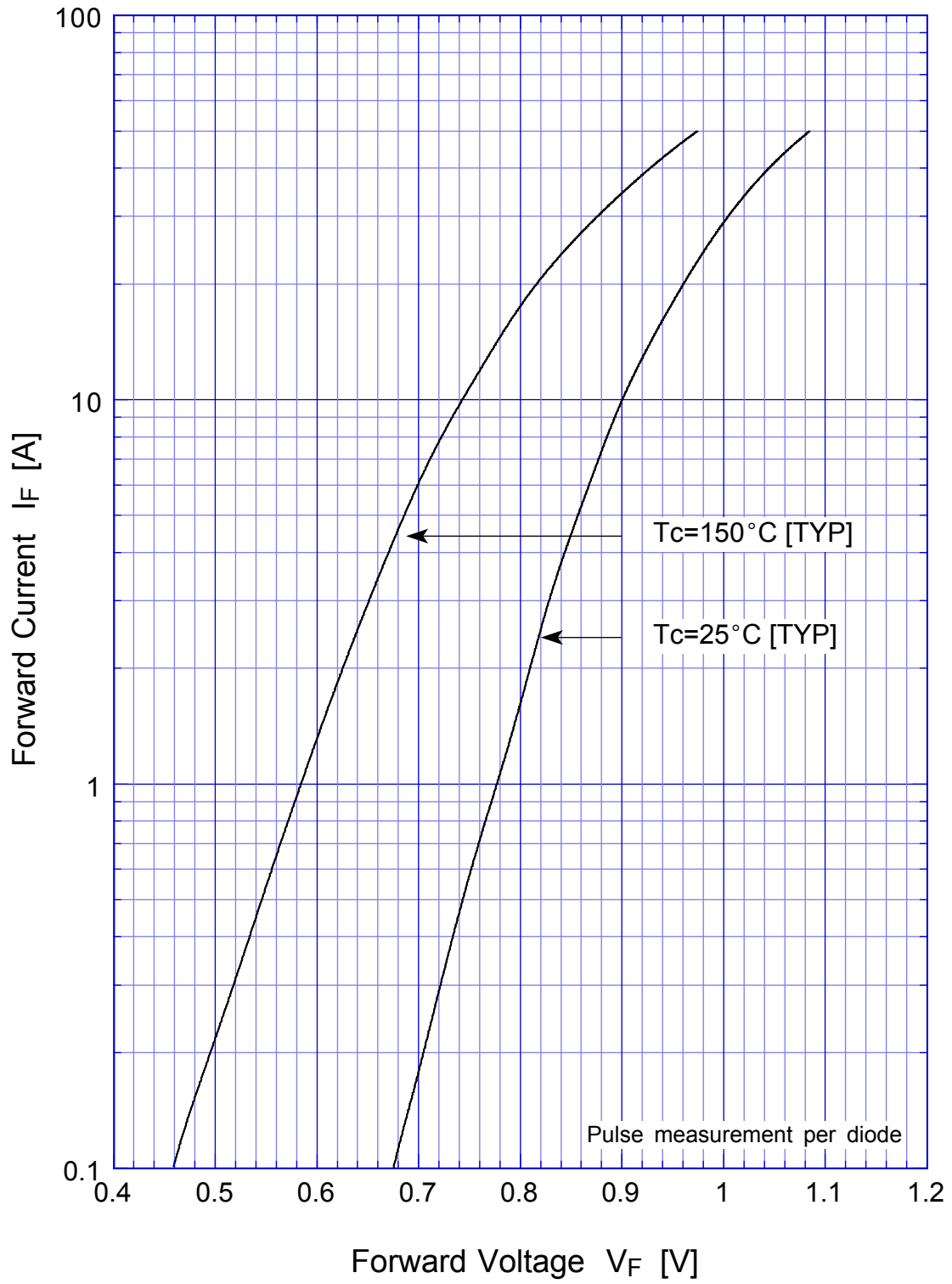
● Electrical Characteristics (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	IF=10A, 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.0.5	°C/W

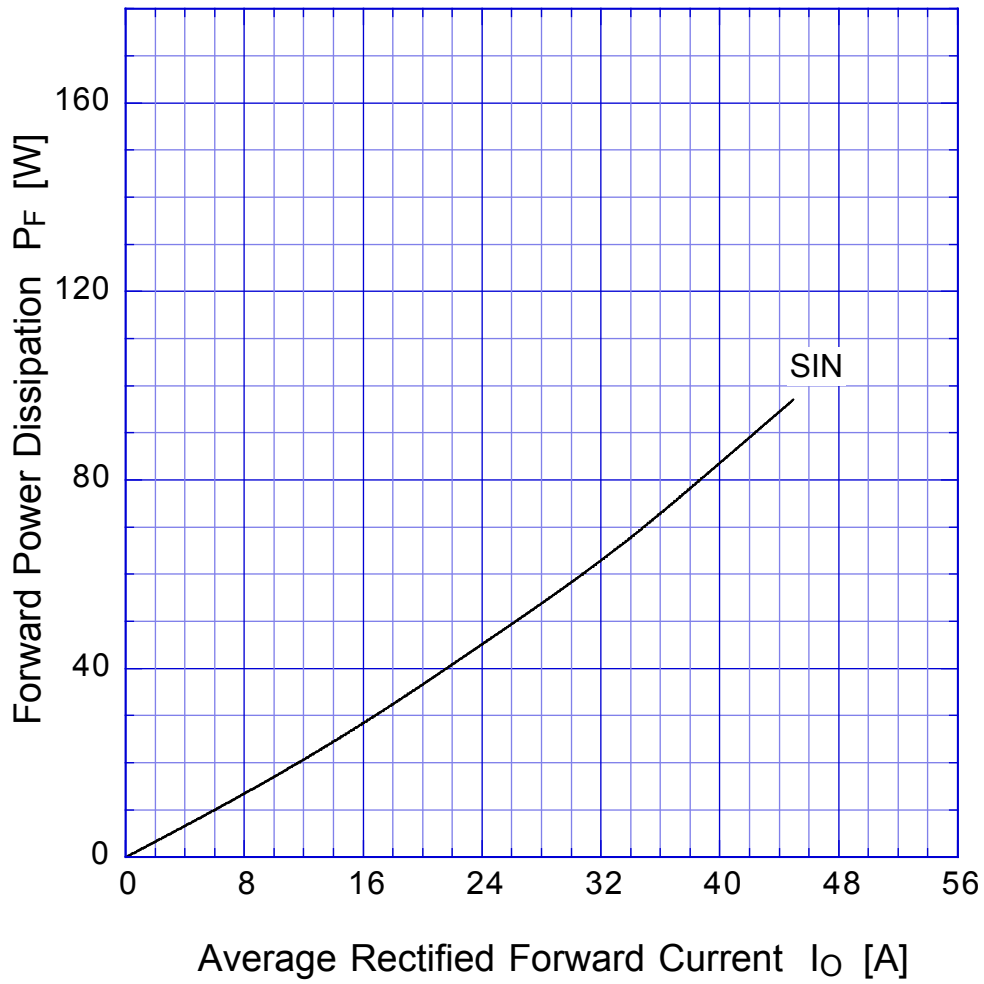


S30VTx

Forward Voltage



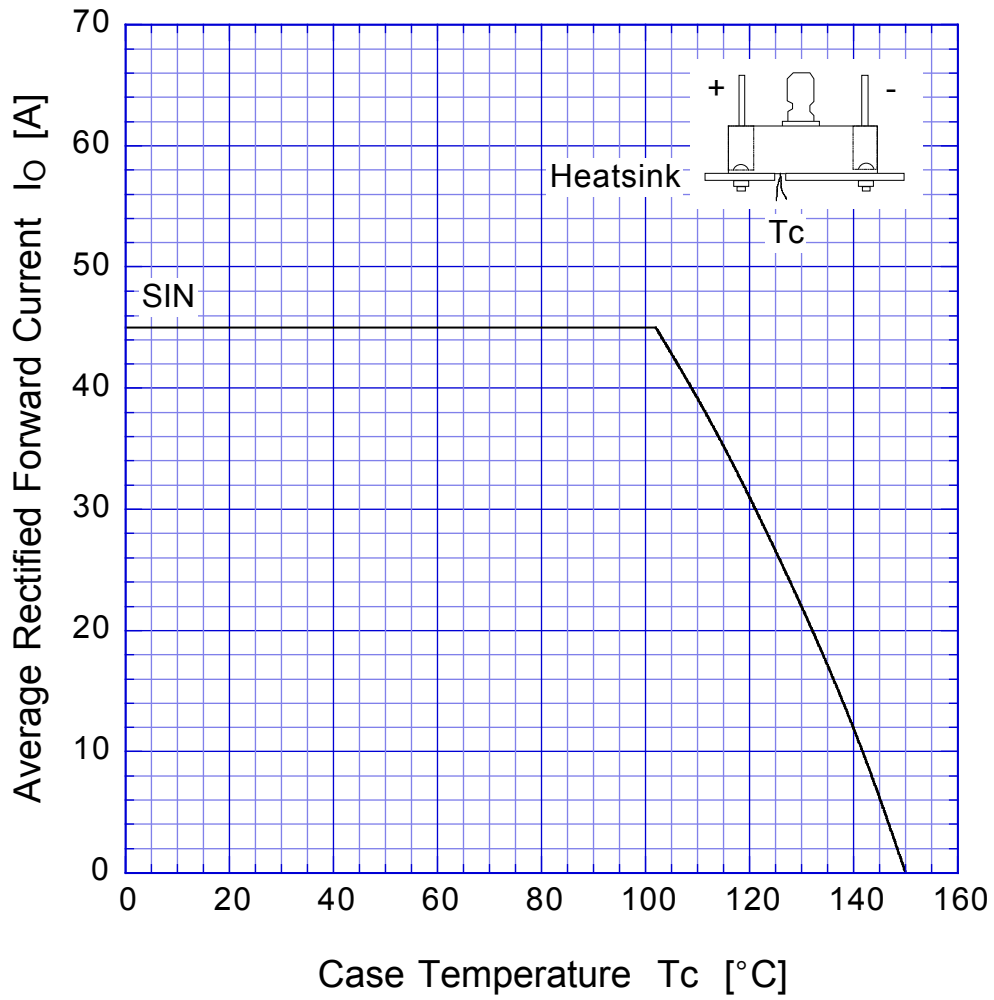
S30VTx Forward Power Dissipation



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

S30VTx

Derating Curve



Sine wave
R-load
with heatsink

S30VTx

Peak Surge Forward Capability

