SHINDENGEN

3 Phase Bridge Diode

Diode Module

S20VT60

600V 20A

FEATURES

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

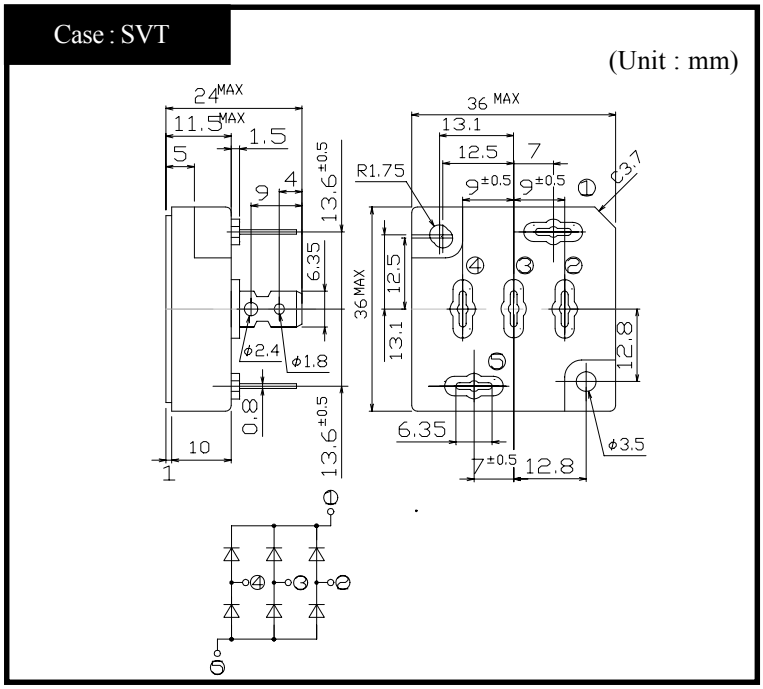
APPLICATION

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

OUTLINE DIMENSIONS

Case : SVT

(Unit : mm)



RATINGS

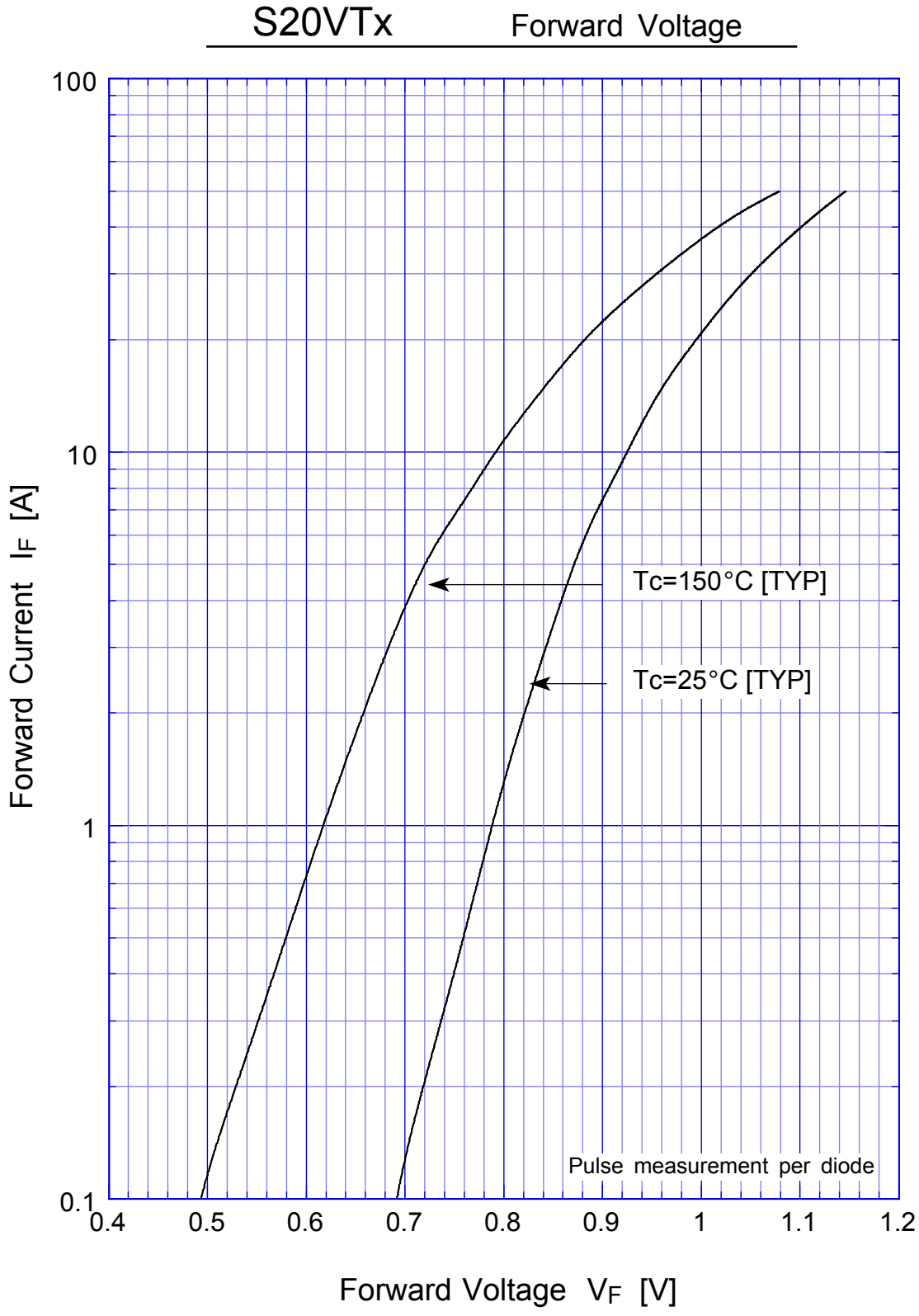
● Absolute Maximum Ratings (If not specified Tc=25℃)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40～150	℃
Operating Junction Temperature	Tj		150	℃
Maximum Reverse Voltage	V_{RM}		600	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, With heatsink, Tc=128℃	20	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per diode, Tj=25℃	300	A
Current Squared Time	I^2t	1ms≦t＜10ms Tc=25℃	300	A^2s
Dielectric Strength	Vdis	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque : 0.6N･m)	0.8	N･m

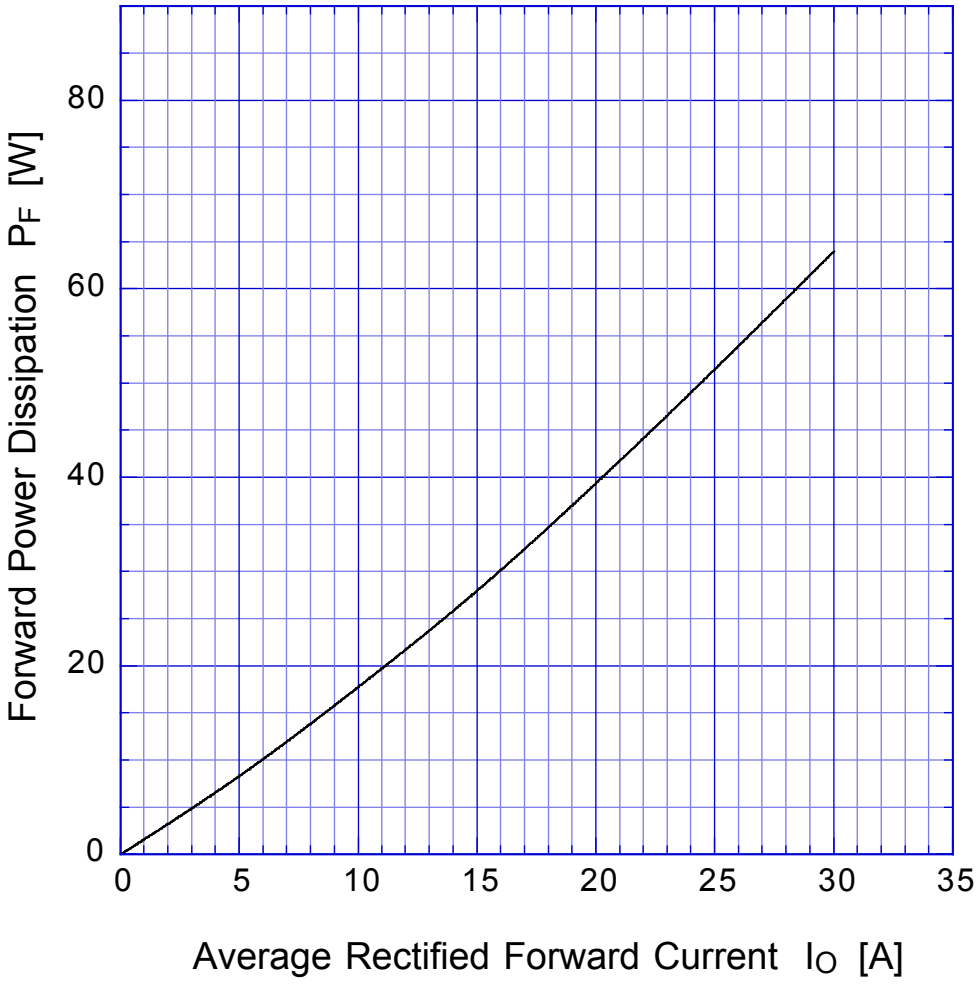
● Electrical Characteristics (If not specified Tc=25℃)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	IF=7A, 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	θjc	junction to case	Max.0.55	℃/W

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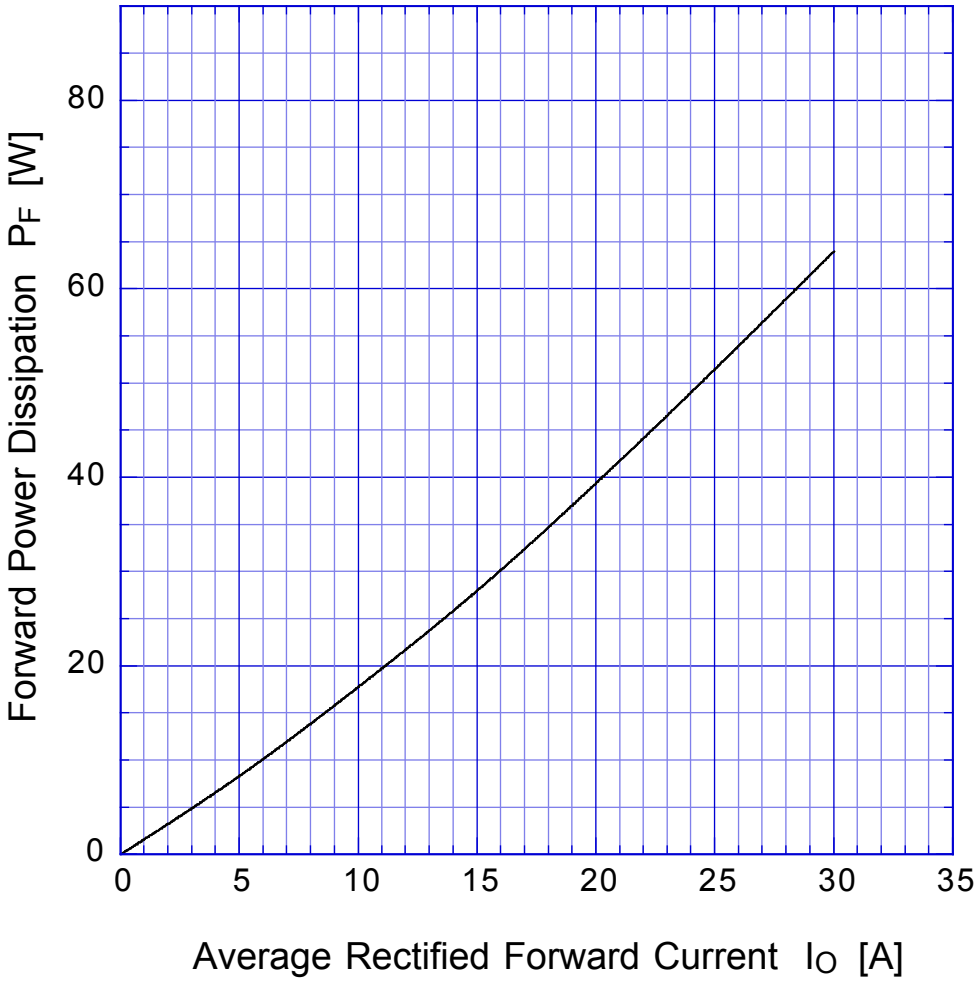

S20VTx
Forward Voltage
100
10
1
0.1
Forward Current IF [A]
Tc=150°C [TYP]
Tc=25°C [TYP]
Pulse measurement per diode
0.4
0.5
0.6
0.7
0.8
0.9
1
1.1
1.2
Forward Voltage VF [V]

S20VTx Forward Power Dissipation



Tj= 150°C
Sine wave

S20VTx Forward Power Dissipation



Tj= 150°C
Sine wave

S20VTx Peak Surge Forward Capability

