

S20VT80

800V 20A

FEATURES

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

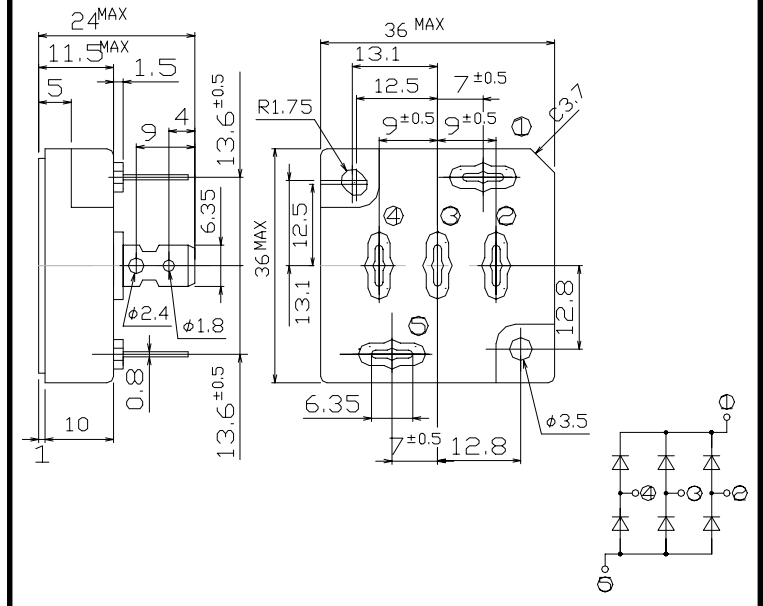
APPLICATION

- Big power supply
- Air conditioner
- Factory automation, Inverter

OUTLINE DIMENSIONS

Case : SVT

(Unit : mm)



RATINGS

- Absolute Maximum Ratings (If not specified Tc=25°C)

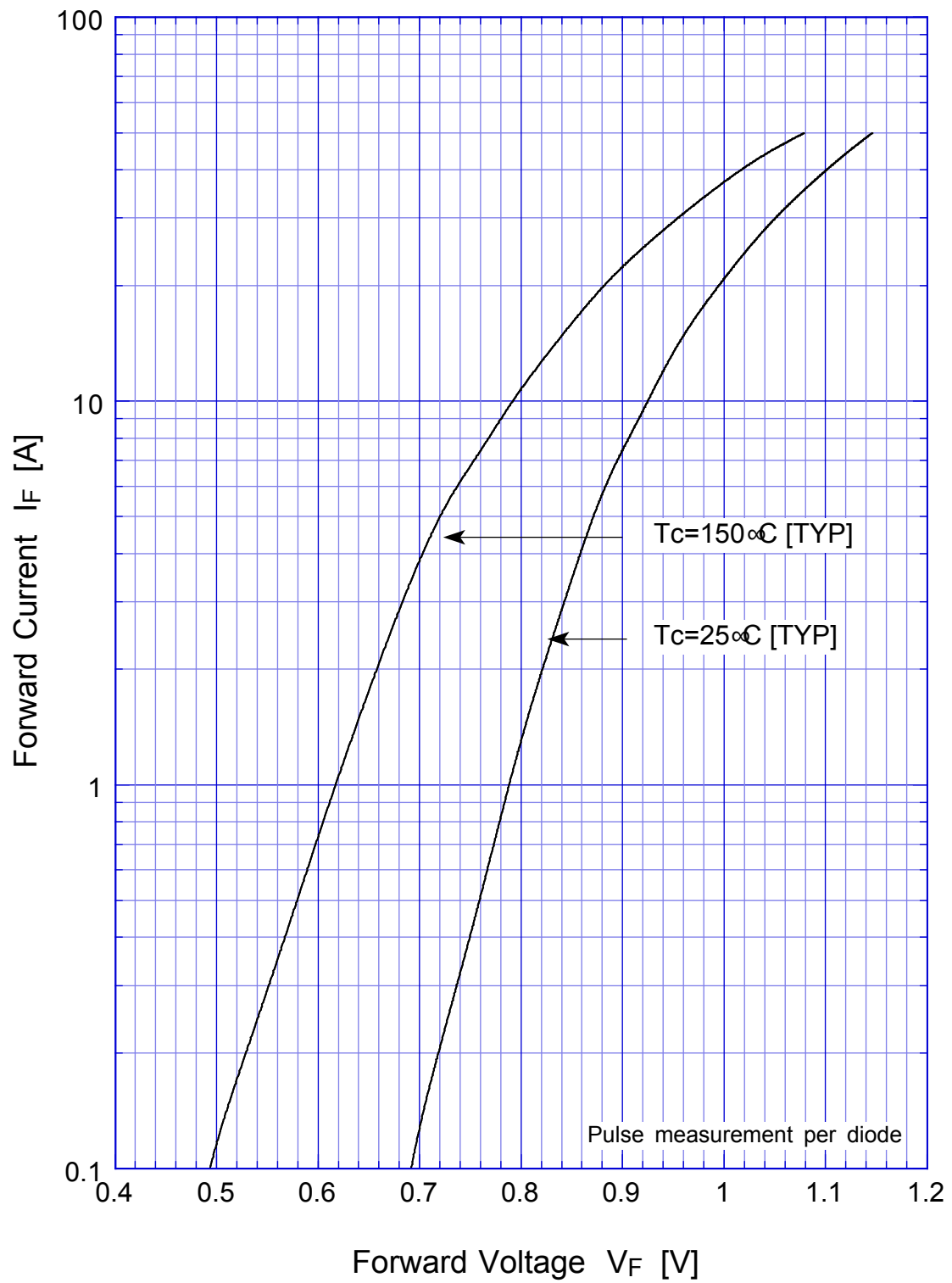
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T _{stg}		-40~150	°C
Operating Junction Temperature	T _j		150	°C
Maximum Reverse Voltage	V _{RM}		800	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load, With heatsink, T _c =128°C	20	A
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per arm, T _j =25°C	300	A
Current Squared Time	I ² t	1ms≤t<10ms T _j =25°C	300	A ² s
Dielectric Strength	V _{dis}	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	$I_F=7A$, Pulse measurement, Rating of per arm	Max.1.05	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement, Rating of per arm	Max.10	μA
Thermal Resistance	θ_{jc}	junction to case	Max.0.55	$^{\circ}C/W$

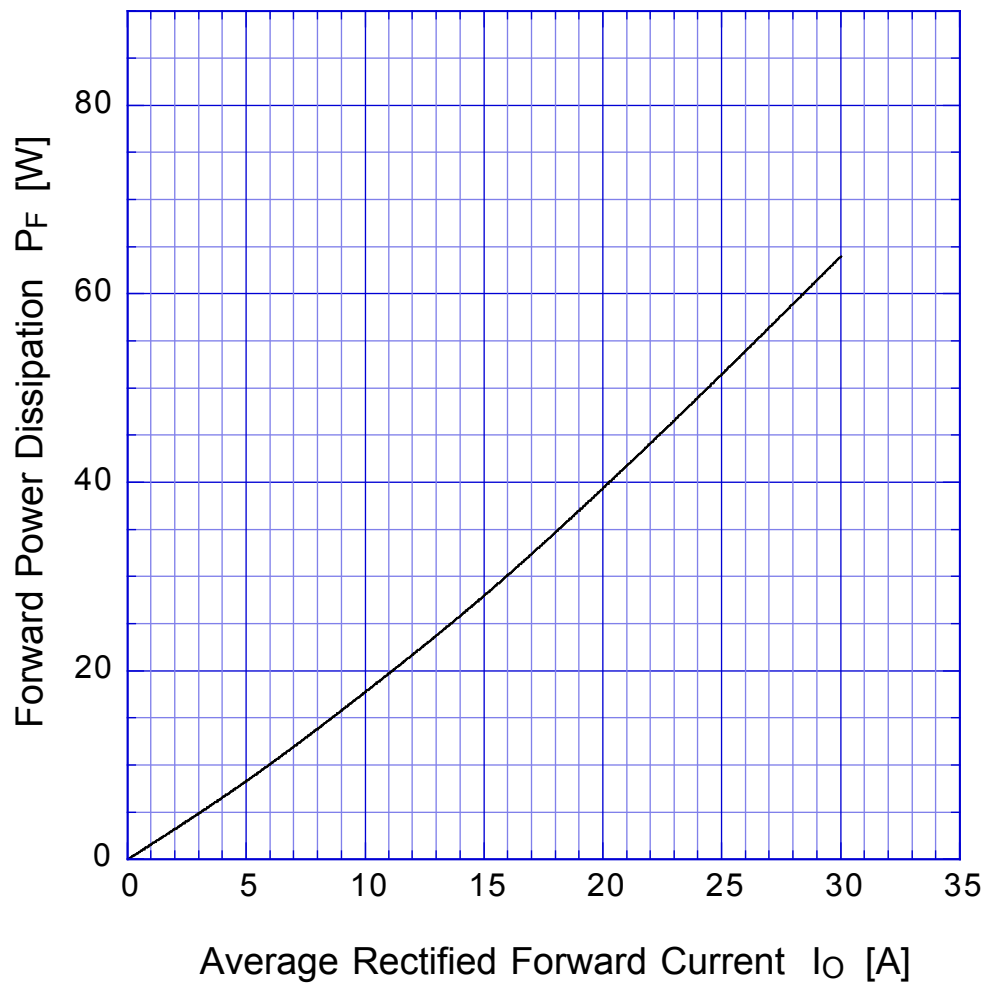
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Forward Voltage



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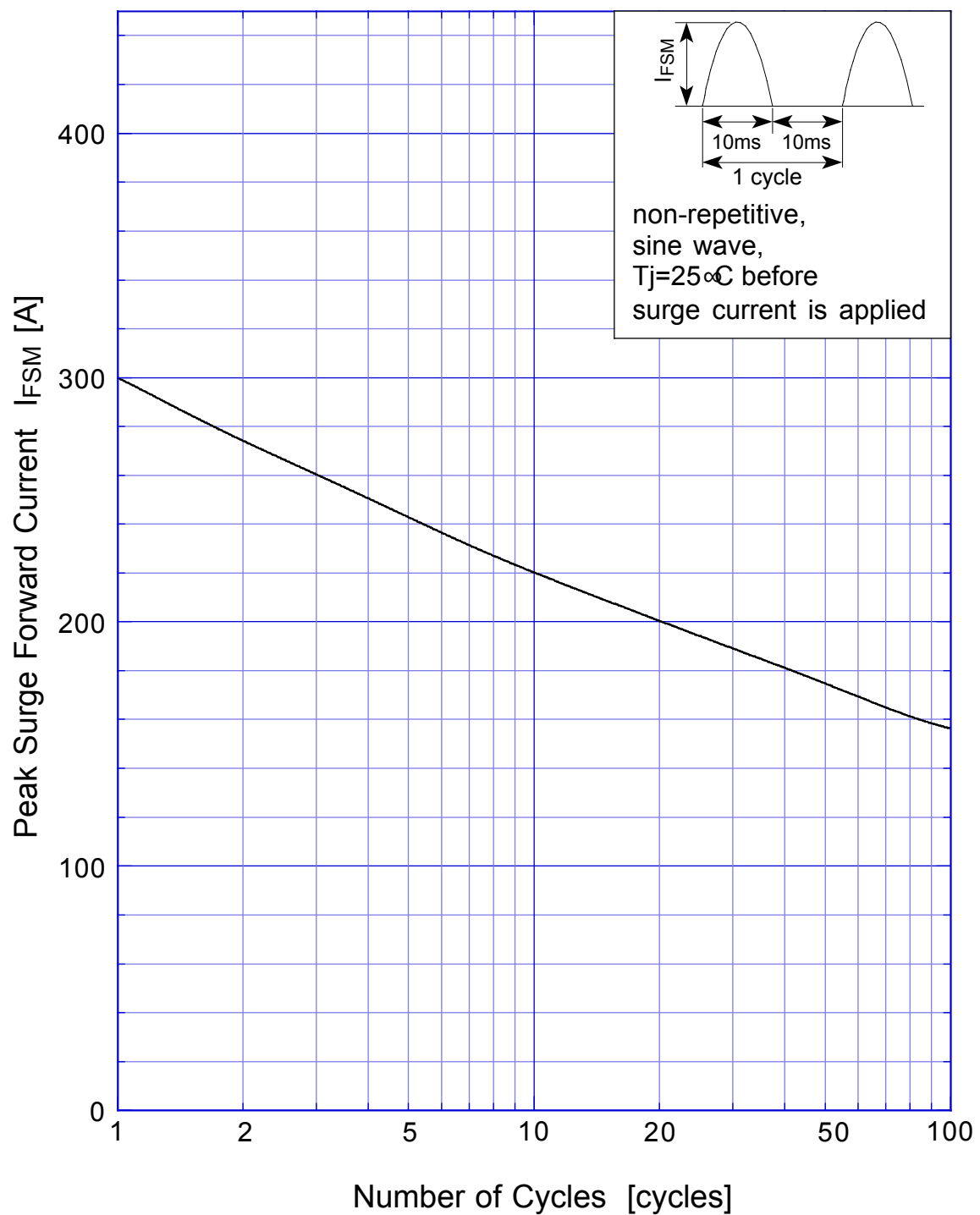
Forward Power Dissipation



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

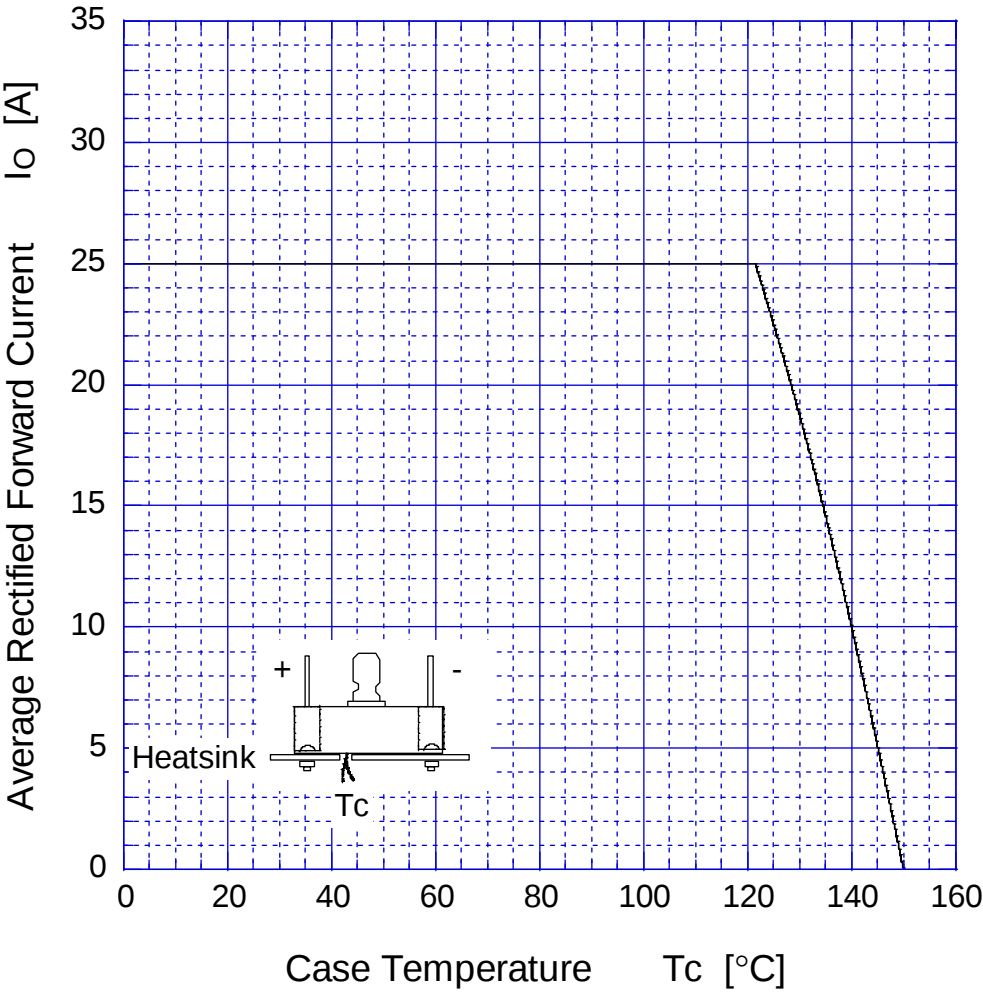
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Peak Surge Forward Capability



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Derating Curve



sine wave
R-load
with heatsink