

# S20VT80

## Bridge Diodes

800V, 20A

### Feature

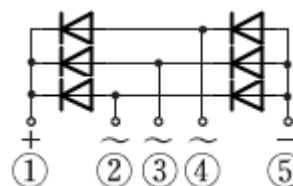
- Faston Terminal
- Pb free terminal
- RoHS:Yes

### OUTLINE

Package (House Name): SVT



### Equivalent circuit



### Absolute Maximum Ratings (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	Tstg		-40 to 150	°C
Junction temperature	Tj		150	°C
Repetitive peak reverse voltage	V <sub>RRM</sub>		800	V
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, With heatsink, Tc=128°C	20	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, per diode, Tj=25°C	300	A
Current squared time	I <sup>2</sup> t	1ms ≤ t < 10ms, Tj=25°C, per diode	300	A <sup>2</sup> s
Dielectric strength	Vdis	Terminals to case, AC 1 minute	2	kV
Mounting torque	TOR	(Recommended torque : 0.6N·m)	0.8	N·m

※ : See the original Specifications

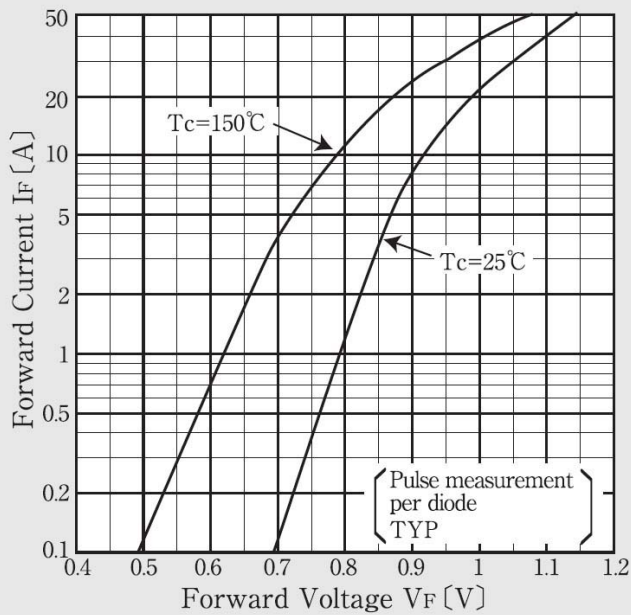
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =7A, Pulse measurement, per diode			1.05	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =800V, Pulse measurement, per diode			10	μA
Thermal resistance	R <sub>th(j-c)</sub>	Junction to case			0.55	°C/W

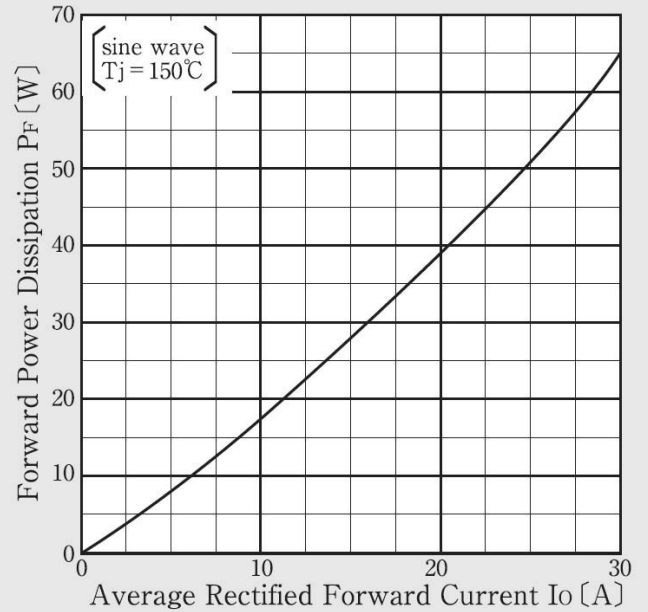
\* : See the original Specifications

# CHARACTERISTIC DIAGRAMS

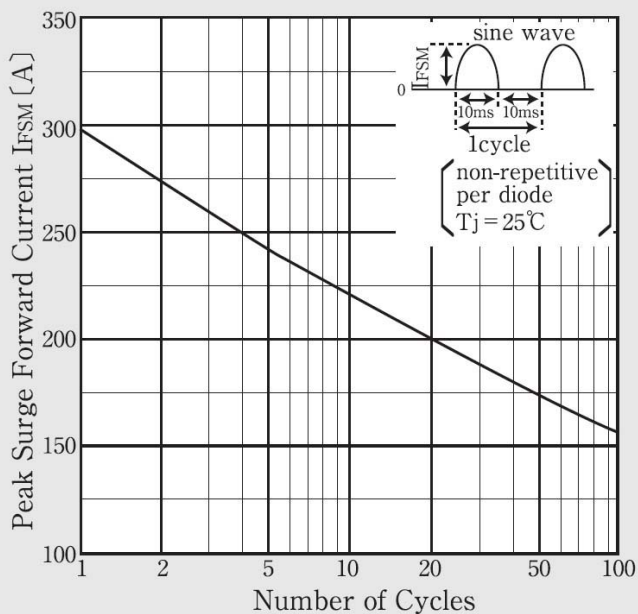
### Forward Voltage



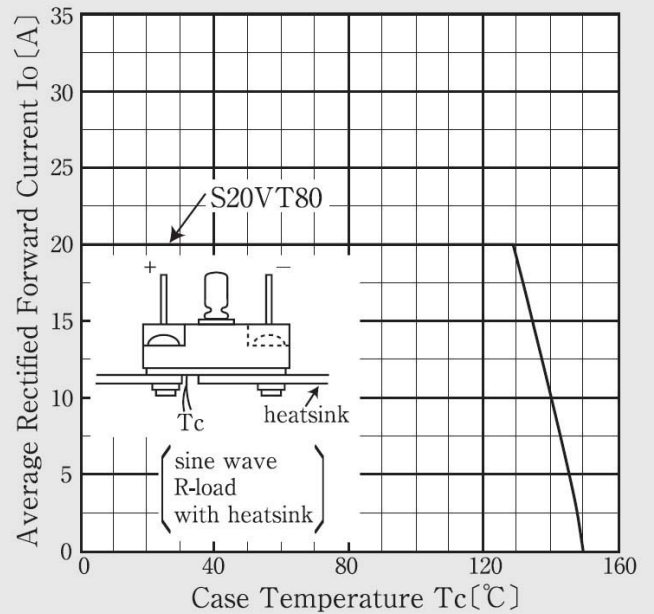
### Forward Power Dissipation



### Peak Surge Forward Current Capability



### Derating Curve





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