SHINDENGEN

3 Phase Bridge Diode

Diode Module

S30VTA160

1600V 30A

FEATURES

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

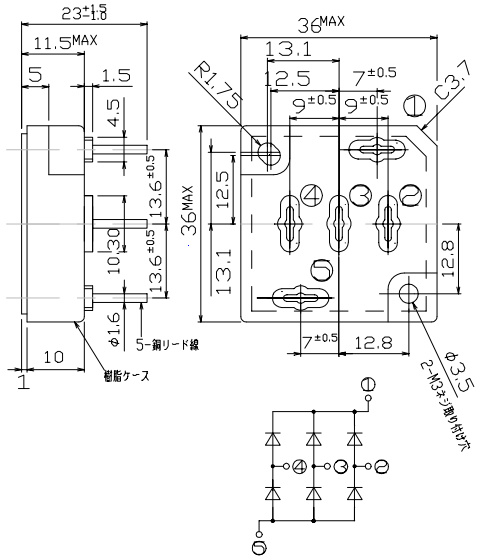
APPLICATION

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

OUTLINE DIMENSIONS

Case : SVTA

(Unit : mm)



RATINGS

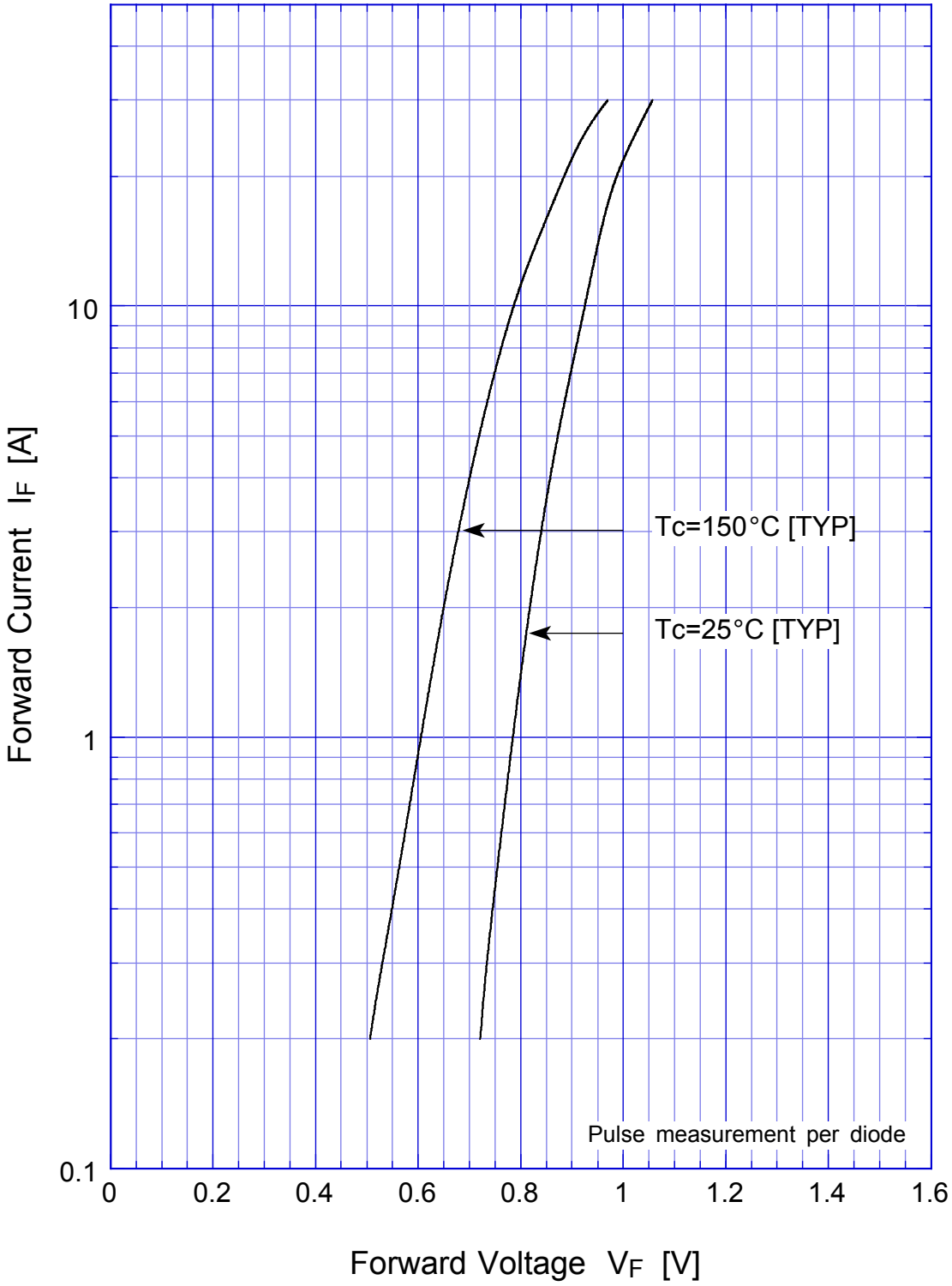
● Absolute Maximum Ratings (If not specified Tc=25℃)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40～150	℃
Operating Junction Temperature	Tj		150	℃
Maximum Reverse Voltage	V_{RM}		1600	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load With heatsink Tc=116℃	30	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per diode Tj=25℃	350	A
Current Squared Time	I^2t	1ms≦t＜10ms Tc=25℃	200	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

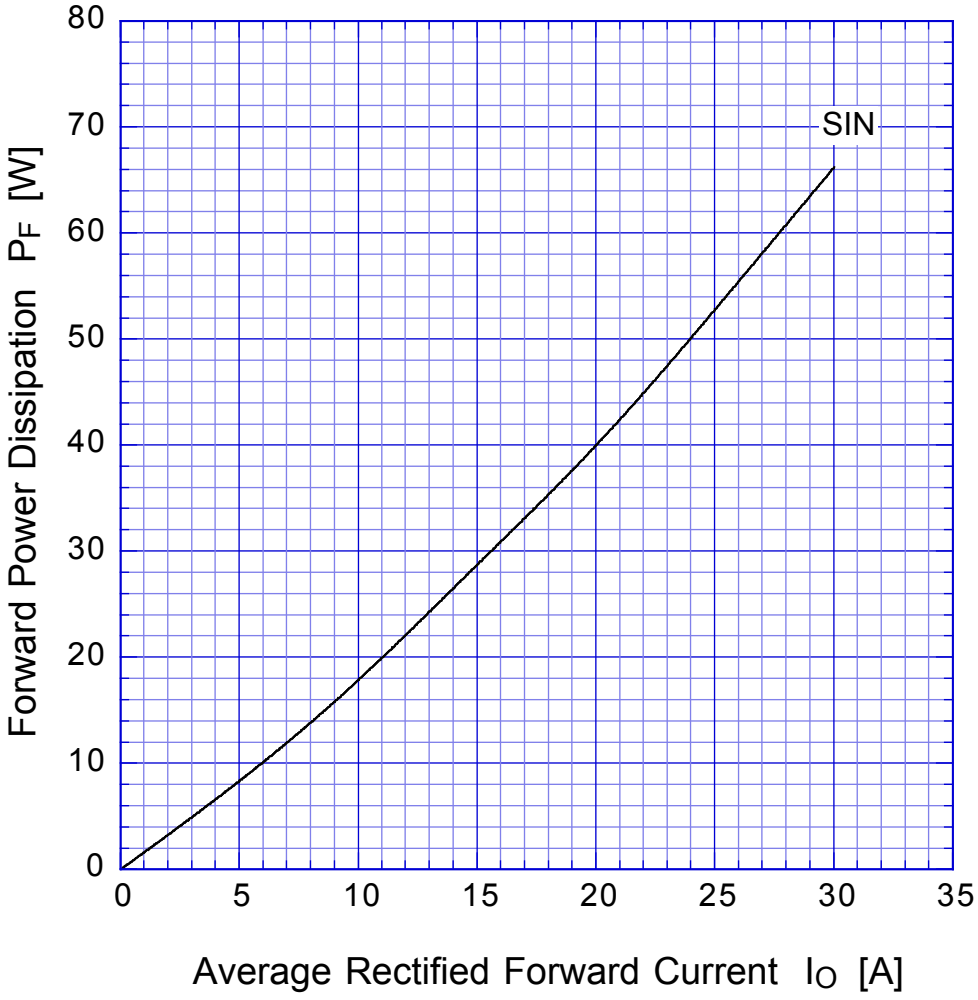
● Electrical Characteristics (If not specified Tc=25℃)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	IF=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.100	μA
Thermal Resistance	θjc	junction to case	Max.0.5	℃/W

S30VTA160 Forward Voltage

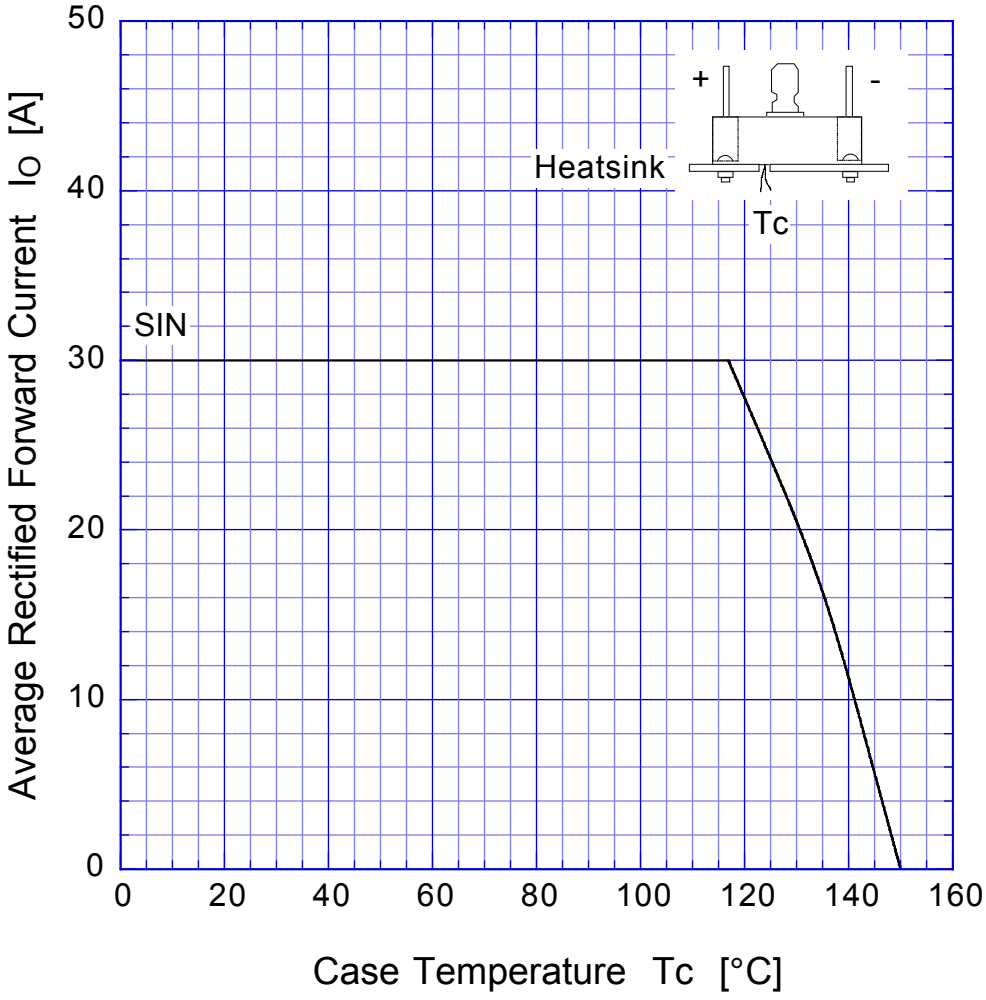


S30VTA160 Forward Power Dissipation



Tj= 150°C
Sine wave

S30VTA160 Derating Curve



S30VTA160 Peak Surge Forward Capability