

SHINDENGEN

General Purpose Rectifiers

3 Phase Bridge Modules

S10VTA60

600V 10A

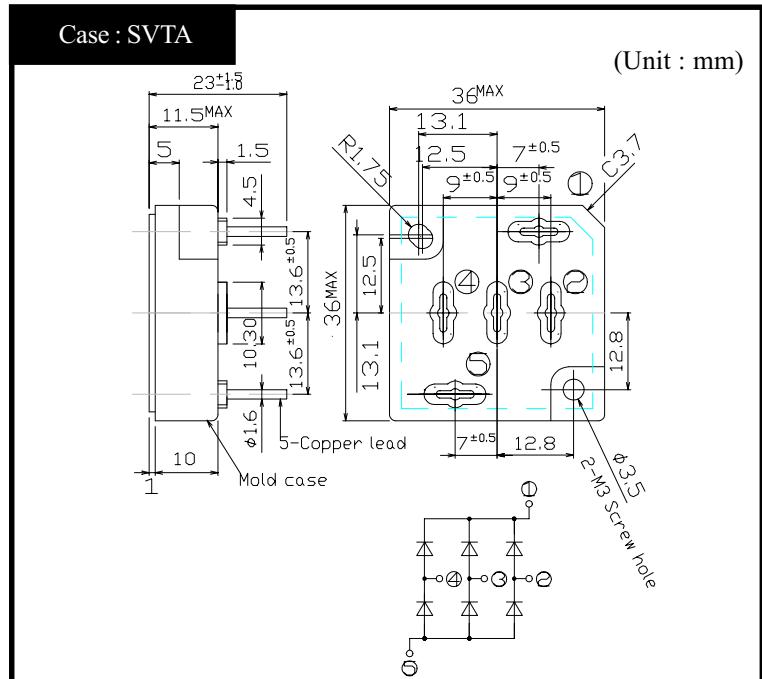
FEATURES

- 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

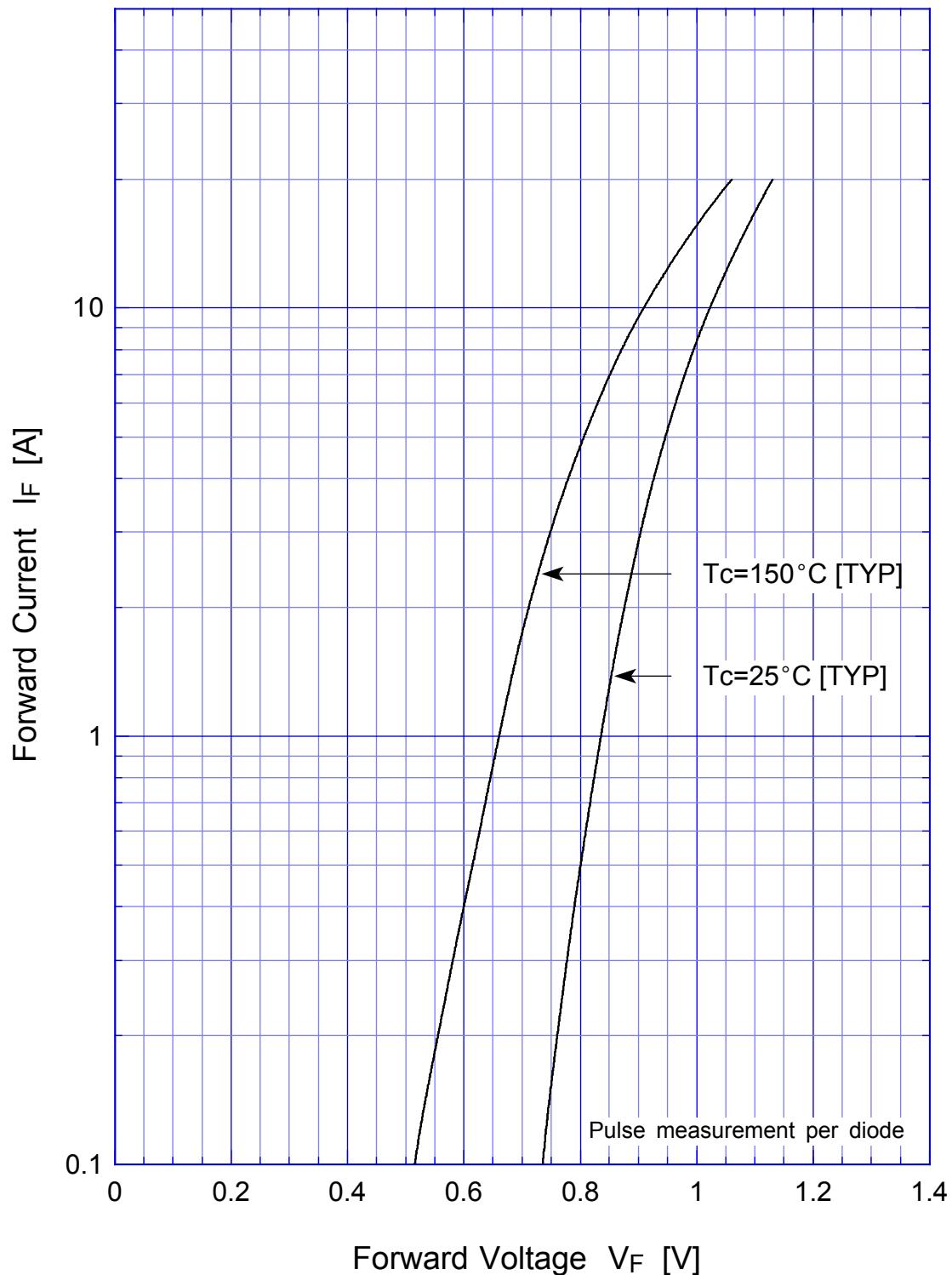
● Absolute Maximum Ratings (If not specified $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40~150	$^\circ\text{C}$
Operating Junction Temperature	T_j		150	$^\circ\text{C}$
Maximum Reverse Voltage	V_{RM}		600	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, With heatsink, $T_c=137^\circ\text{C}$	10	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per arm, $T_j=25^\circ\text{C}$	170	A
Current Squared Time	I^2t	$2\text{ms} \leq t < 10\text{ms}$, $T_j=25^\circ\text{C}$	140	A^2s
Dielectric Strength	V_{dis}	Terminals to case, AC 1 minute	2	kV
Mounting Torque	T_{OR}	(Recommended torque : 0.6N·m)	0.8	N·m

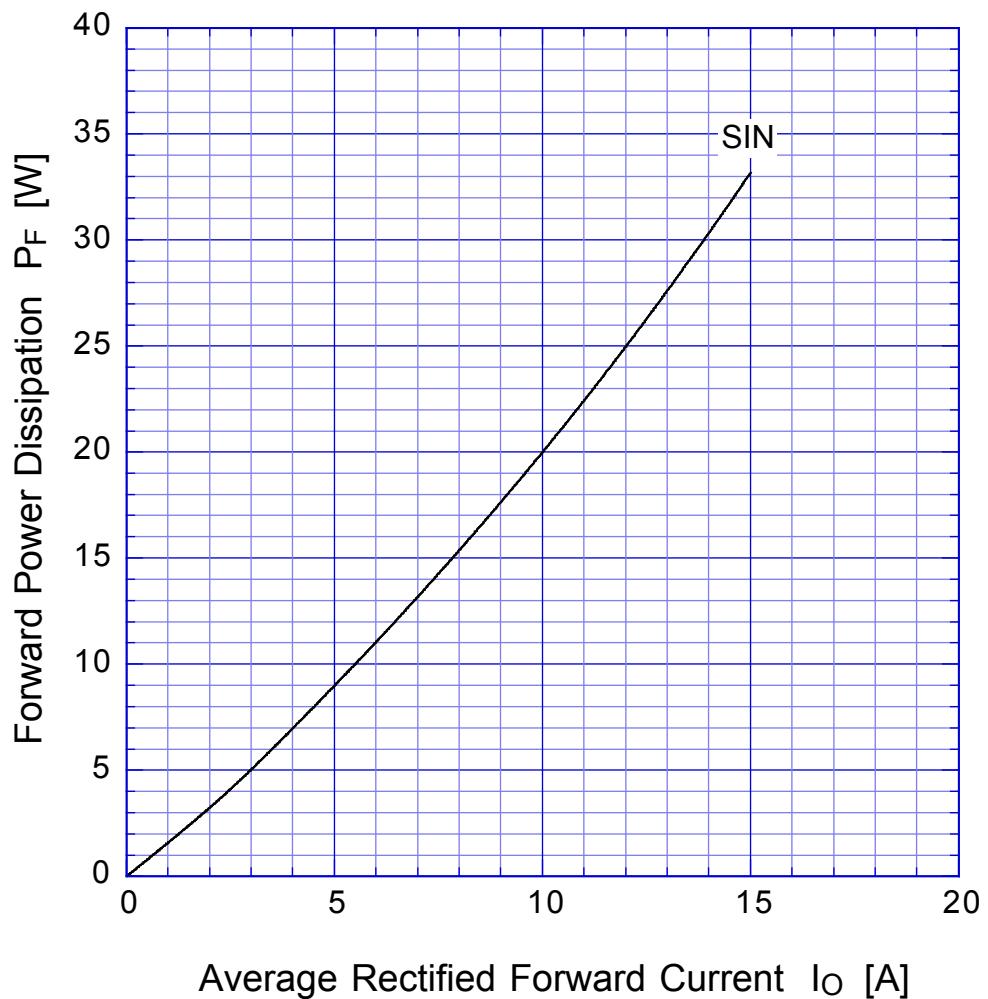
● Electrical Characteristics (If not specified $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=3.5\text{A}$, 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.0.65	$^\circ\text{C}/\text{W}$

S10VTA60 Forward Voltage

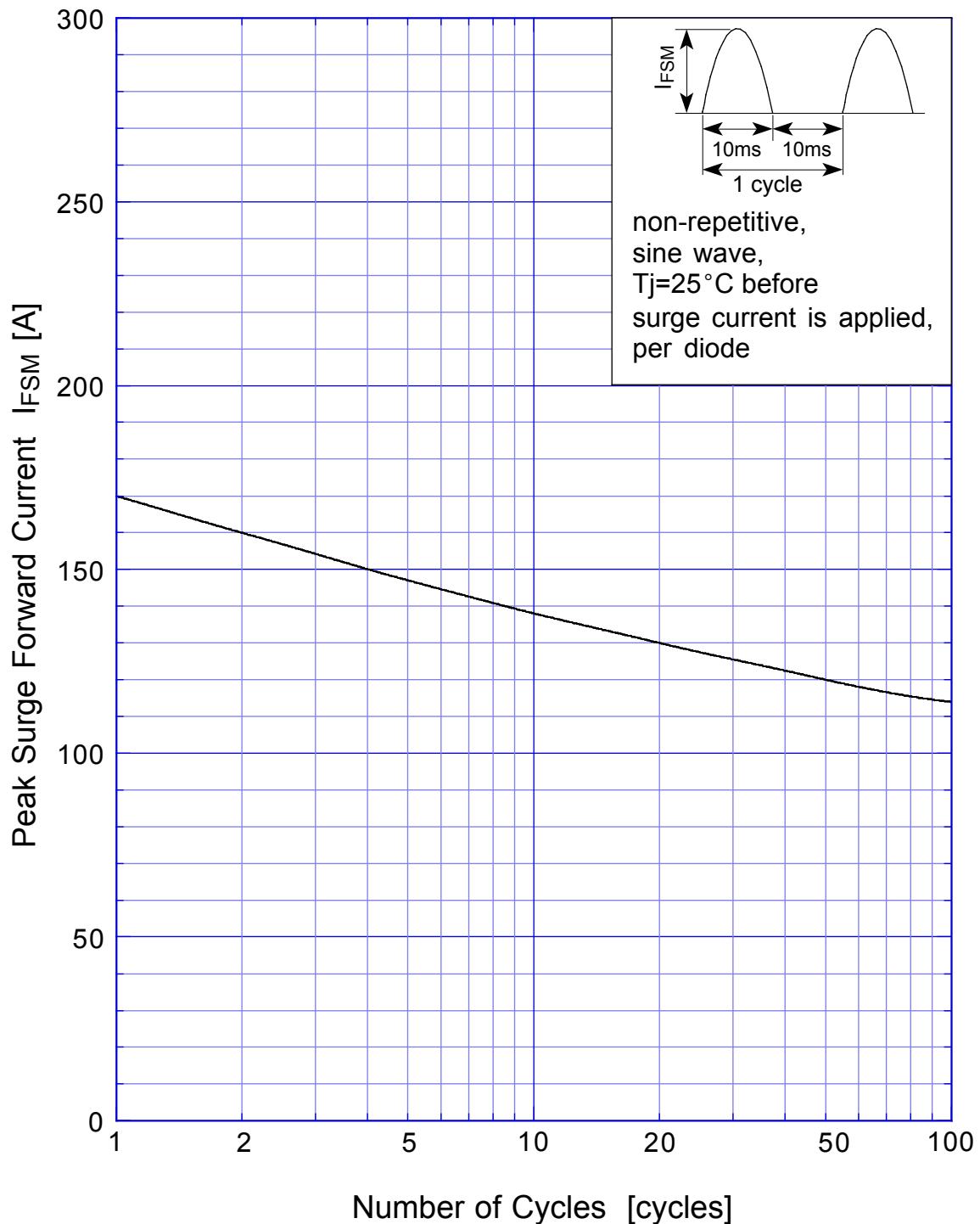


S10VTA60 Forward Power Dissipation



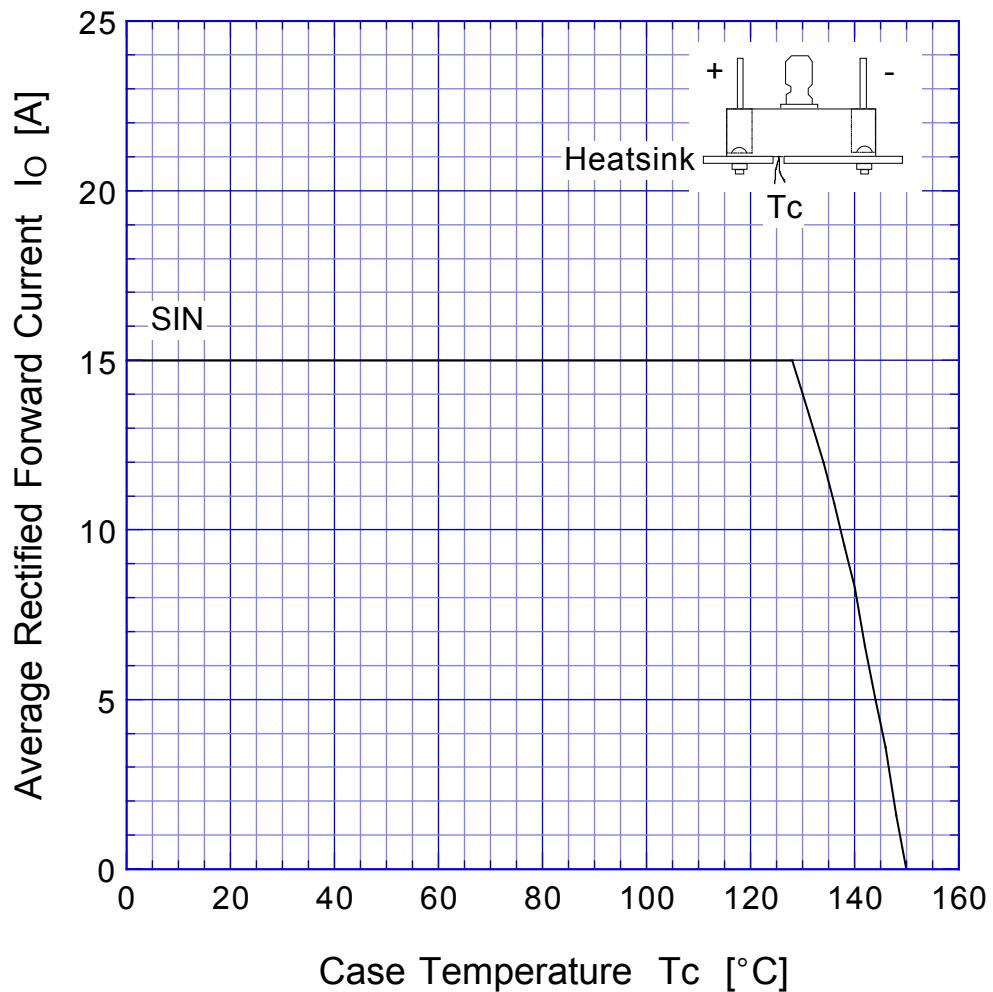
$T_j = 150^\circ\text{C}$
Sine wave

S10VTA60 Peak Surge Forward Capability



S10VTA60

Derating Curve



$V_R = V_{RM}$
Sine wave
R-load
with heatsink