

# SHINDENGEN

## 3 Phase Bridge Diode

## Diode Module

# D30VTA160

## 1600V 30A

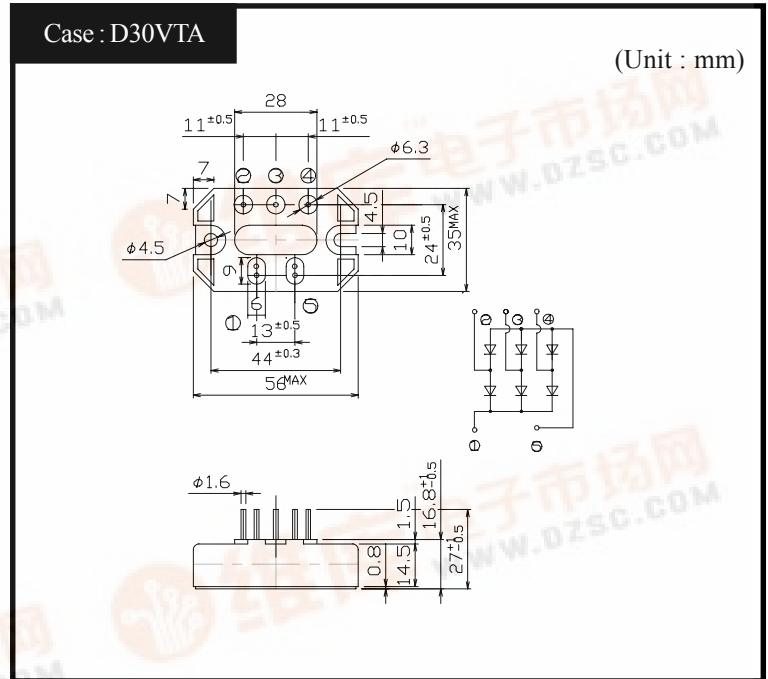
### FEATURES

- Dual In-Line Package
- Compact 3 phase bridge
- High voltage, 1600V
- Applicable to mount on glass-epoxy substrate

### APPLICATION

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

### OUTLINE DIMENSIONS



### RATINGS

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

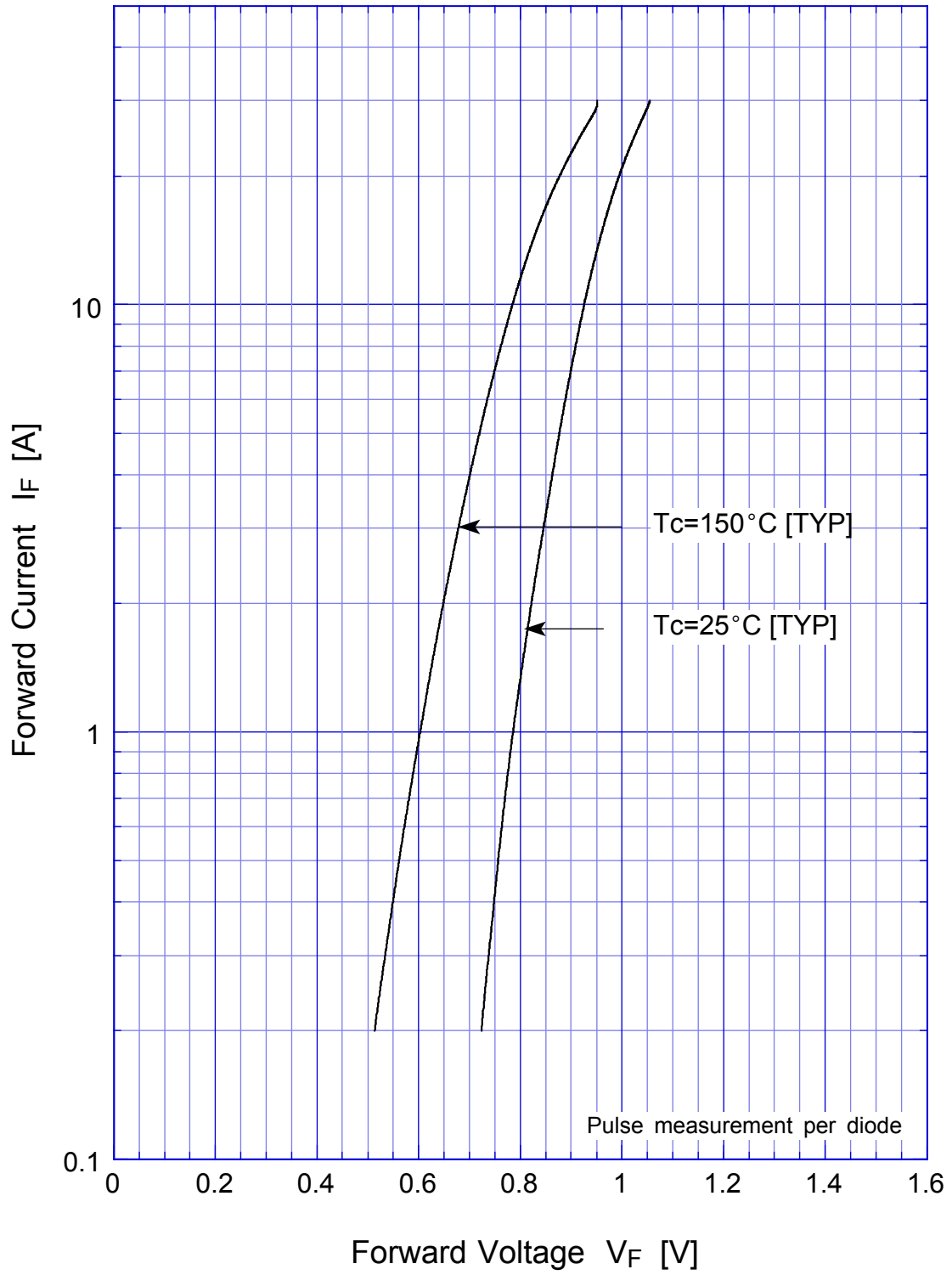
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	V <sub>RM</sub>		1600	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load With heatsink Tc=105°C	30	A
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per diode Tj=25°C	350	A
Current Squared Time	I <sup>2</sup> t	1ms ≤ t < 10ms Tc=25°C	300	A <sup>2</sup> s
Dielectric Strength	Vdis	Terminals to case, AC 1 minute	2.5	kV
Mounting Torque	TOR	(Recommended torque)	1	N·m

- Electrical Characteristics (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	IF=10A, Pulse measurement, Rating of per diode	Max.1.05	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement, Rating of per diode	Max.100	μA
Thermal Resistance	θ <sub>jc</sub>	junction to case	Max.0.7	°C/W

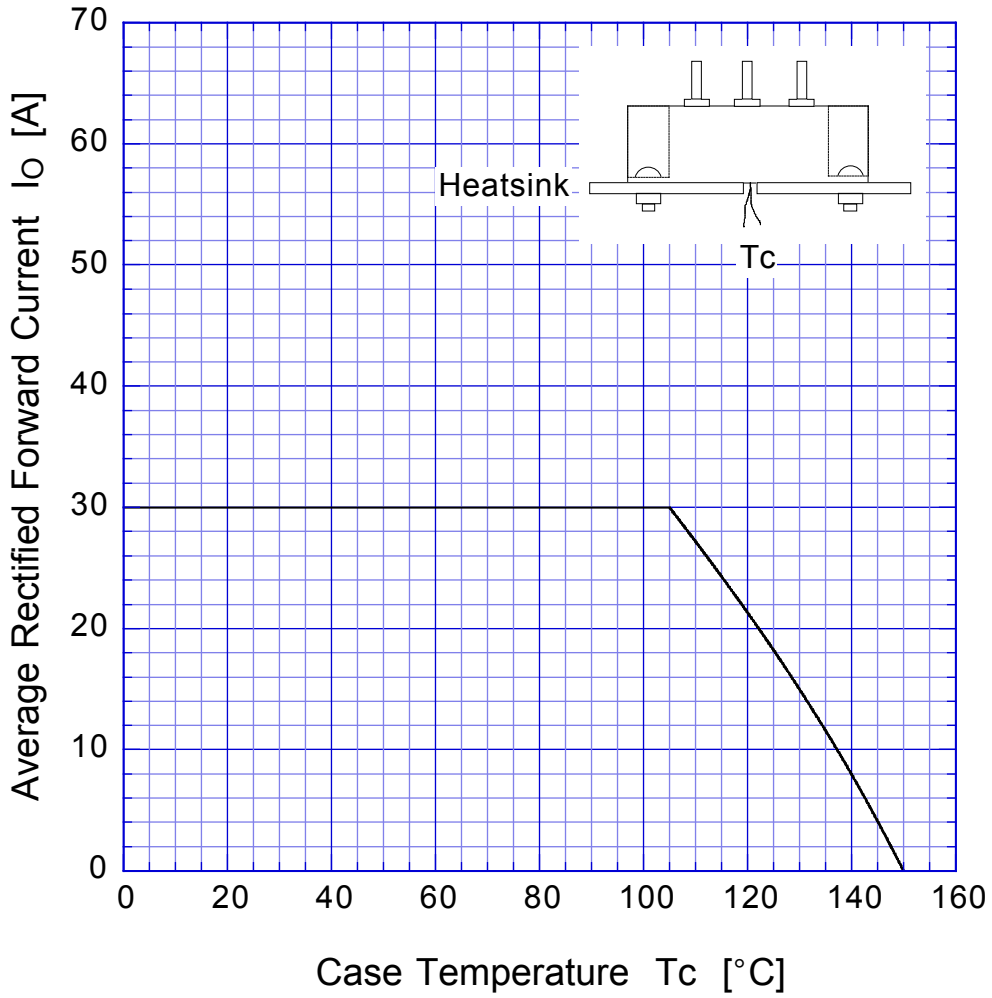


# D30VTA160 Forward Voltage



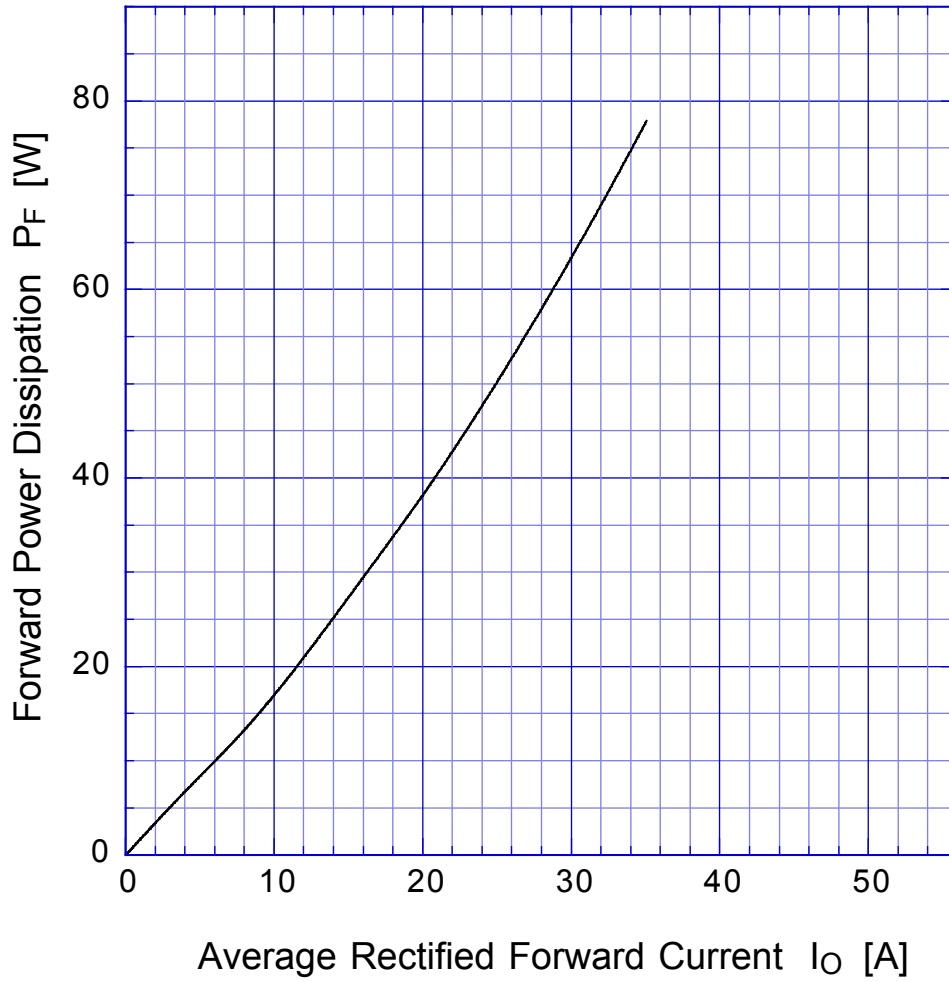
# D30VTA160

## Derating Curve



Sine wave  
R-load  
with heatsink

## D30VTA160 Forward Power Dissipation



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

## D30VTA160 Peak Surge Forward Capability

