

# S30V80V

General Rectifying Diodes  
800V, 30A

## Feature

- High Voltage
- Available for automotive use
- Pb free terminal
- RoHS:Yes

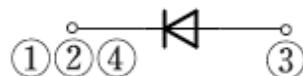
## OUTLINE

Package (House Name): MTO-3PV

Package (JEDEC Code): TO-247AD



## Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T <sub>stg</sub>		-55 to 150	°C
Junction temperature	T <sub>j</sub>		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=131°C	30	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	450	A
Surge forward current	I <sub>FSM1</sub>	tp=1ms, Tj=25°C, Non-repetitive	1423	A
Current squared time	I <sup>2</sup> t	1ms≤tp<10ms, Rating of per diode	1012.5	A <sup>2</sup> s
Mounting torque	T <sub>OR</sub>	(Recommended torque:0.5N·m)	0.8	N·m

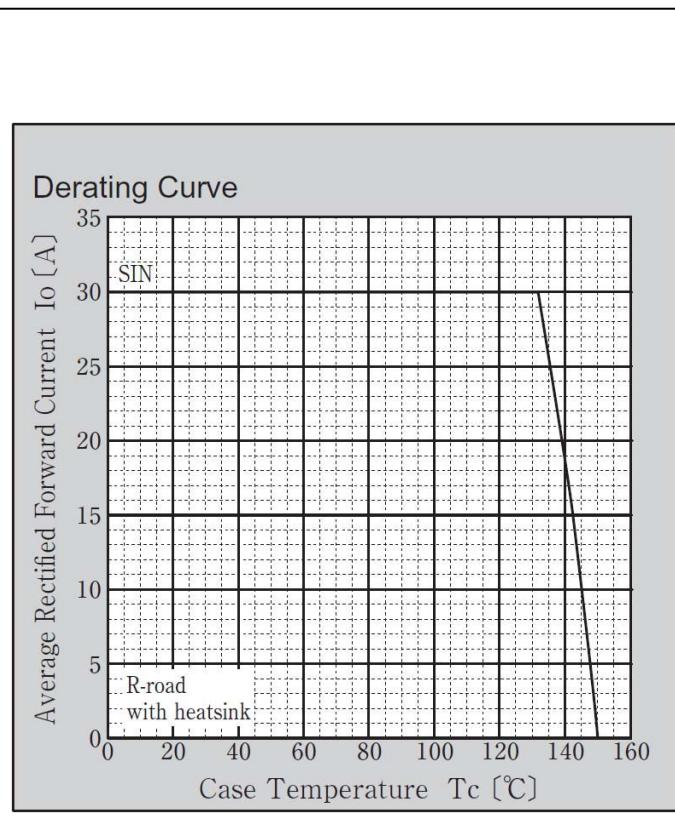
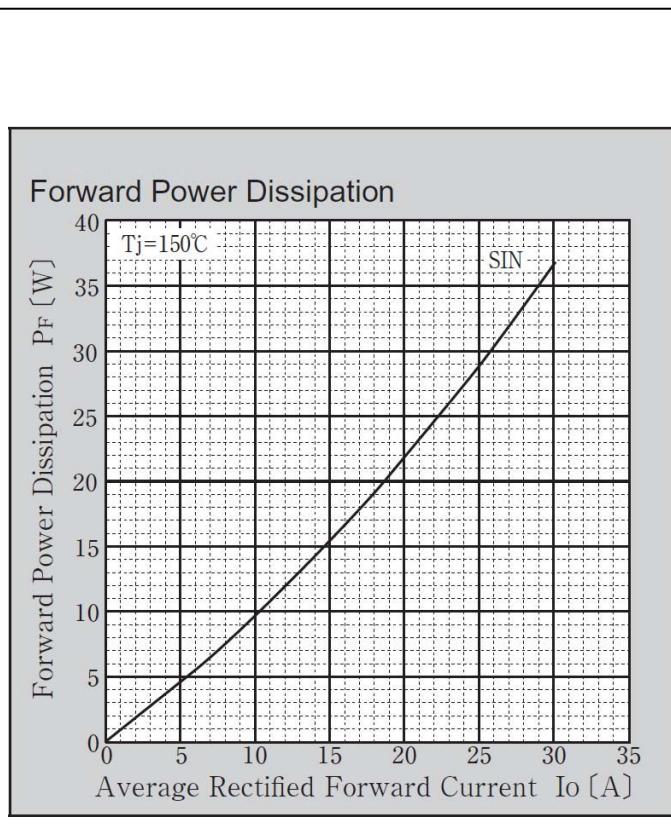
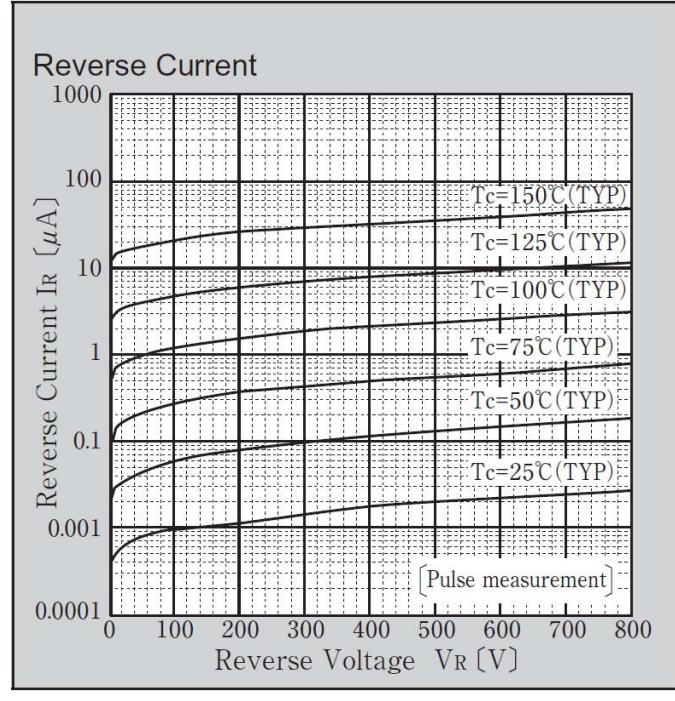
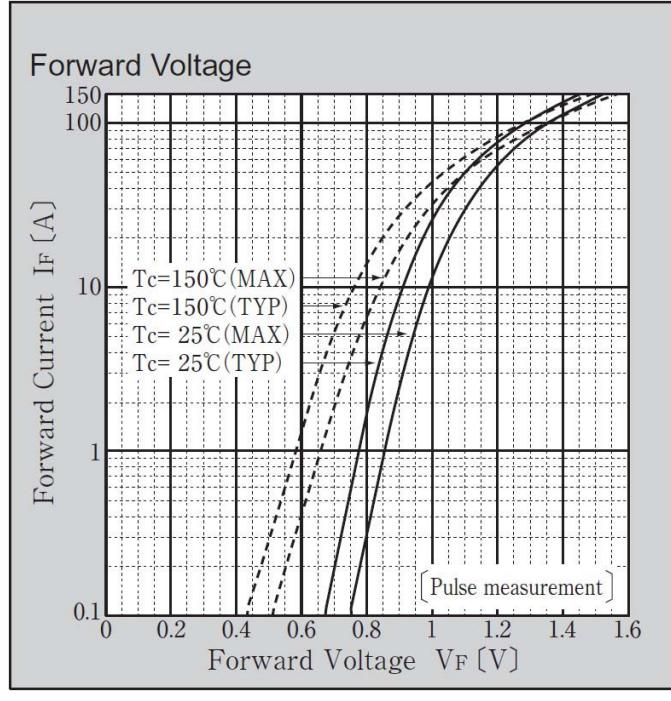
※ :See the original Specifications

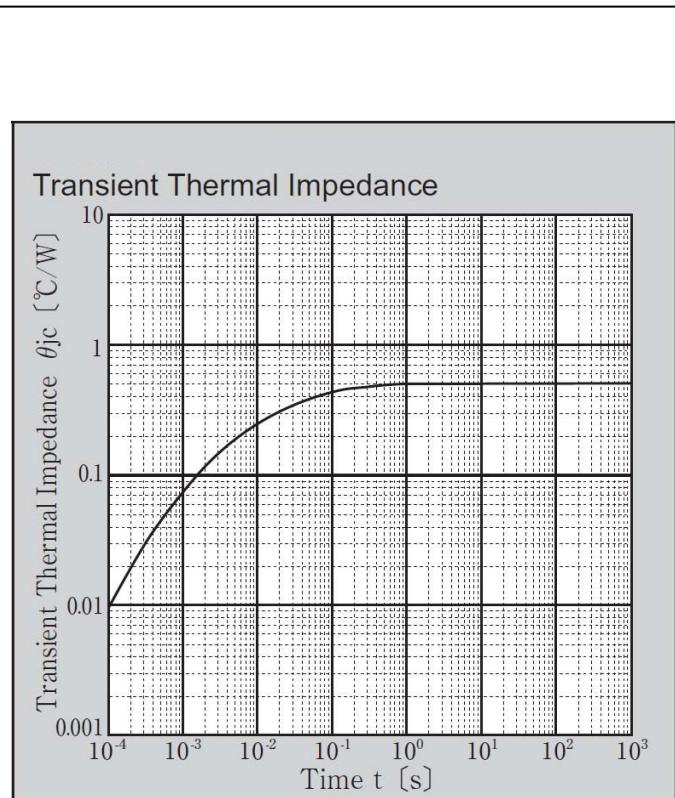
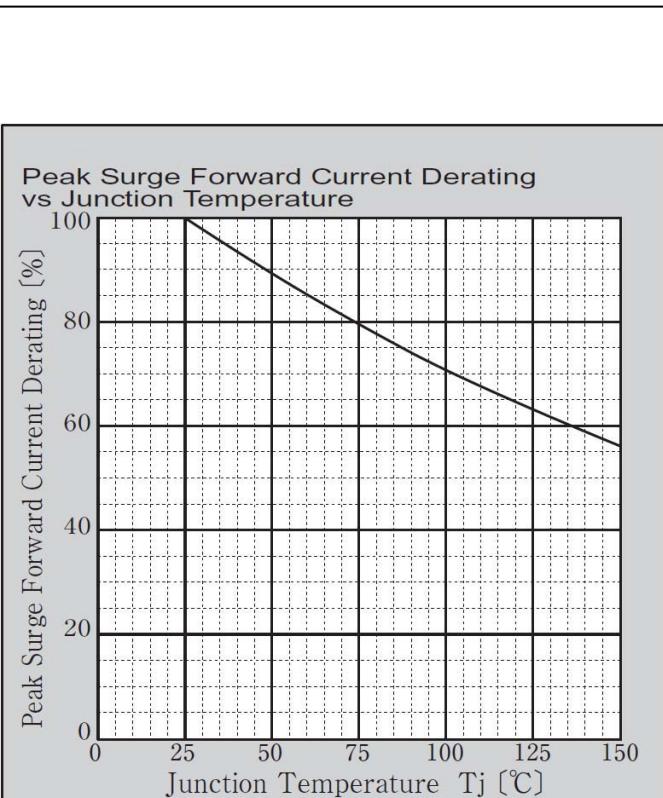
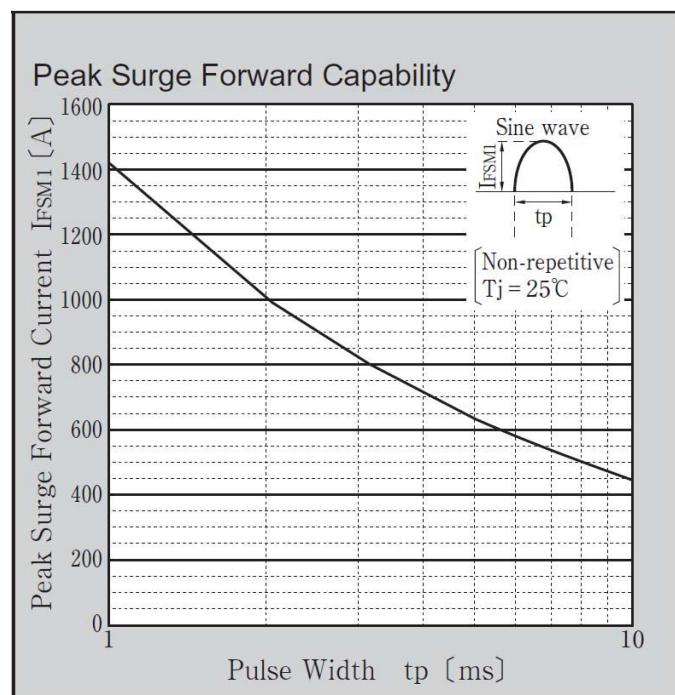
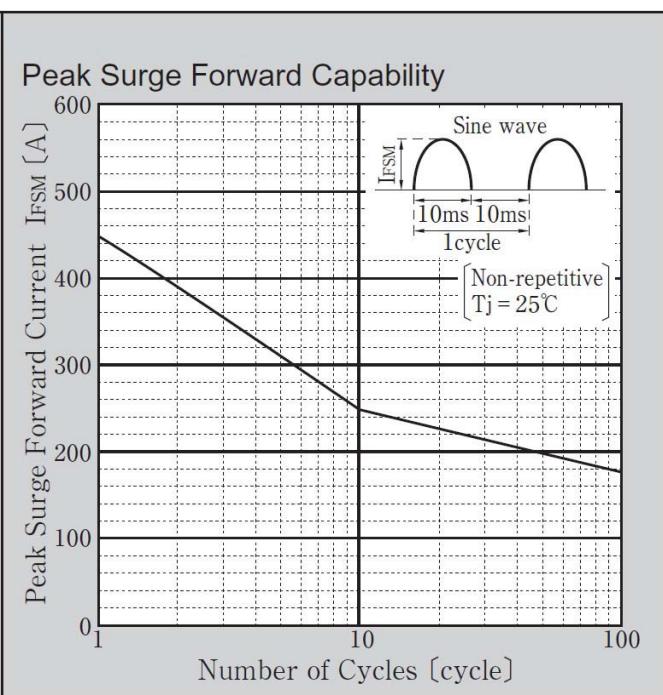
**Electrical Characteristics** (unless otherwise specified :  $T_c=25^\circ\text{C}$ )

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	$IF=30\text{A}$ , Pulse measurement			1.1	V
Reverse current	$I_R$	$VR=800\text{V}$ , Pulse measurement			10	$\mu\text{A}$
Thermal resistance	$R_{th(j-c)}$	Junction to case, With heatsink			0.5	$^\circ\text{C/W}$

※ :See the original Specifications

## CHARACTERISTIC DIAGRAMS



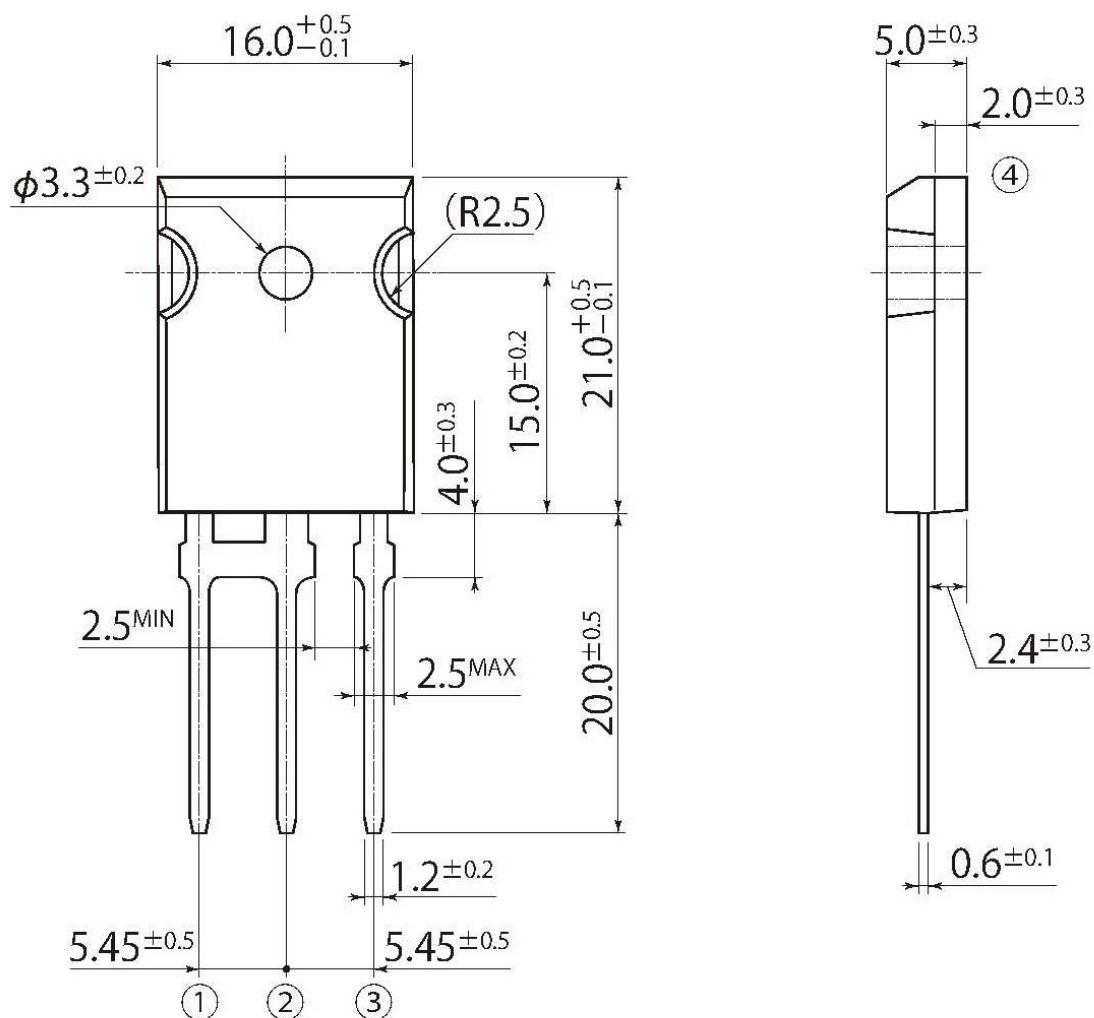


## Outline Dimensions

unit:mm

K6

JEDEC Code	TO-247AD
JEITA Code	—
House Name	MTO-3PV



## Notes

1. If you wish to use any such product, please be sure to refer to the specifications issued by Shindengen.
2. All products described or contained herein are designed with a quality level intended for use in standard applications requiring an ordinary level of reliability. If these products are to be used in equipment or devices for special or specific applications requiring an extremely high grade of quality or reliability in which failures or malfunctions of products may directly affect human life or health, a local Shindengen office must be contacted in advance to confirm that the intended use of the product is appropriate. Shindengen products are grouped into the following three applications according the quality grade.

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Computers, office automation and other office equipment, communication terminals, test and measurement equipment, audio/visual equipment, amusement equipment, consumer electronics, machine tools, personal electronic equipment, industrial equipment, etc.

### 【Special applications】

Transportation equipment (vehicles, ships, etc.), trunk-line communication equipment, traffic signal control systems, anti-disaster/crime systems, safety equipment, medical equipment, etc.

### 【Specific applications】

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