

S30V80V

General Rectifying Diodes

800V, 30A

Feature

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

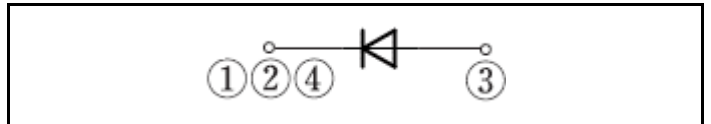
OUTLINE

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 _{stg}		-55 to 150	°C
Junction temperature	T _j		150	°C
Repetitive peak reverse voltage	V _{RRM}		800	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, With heatsink T _c =131°C	30	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, T _j =25°C	450	A
Surge forward current	I _{FSM1}	t _p =1ms, T _j =25°C, Non-repetitive	1423	A
Current squared time	I ² t	1ms ≤ t _p < 10ms, Rating of per diode	1012.5	A ² s
Mounting torque	TOR	(Recommended torque:0.5N·m)	0.8	N·m

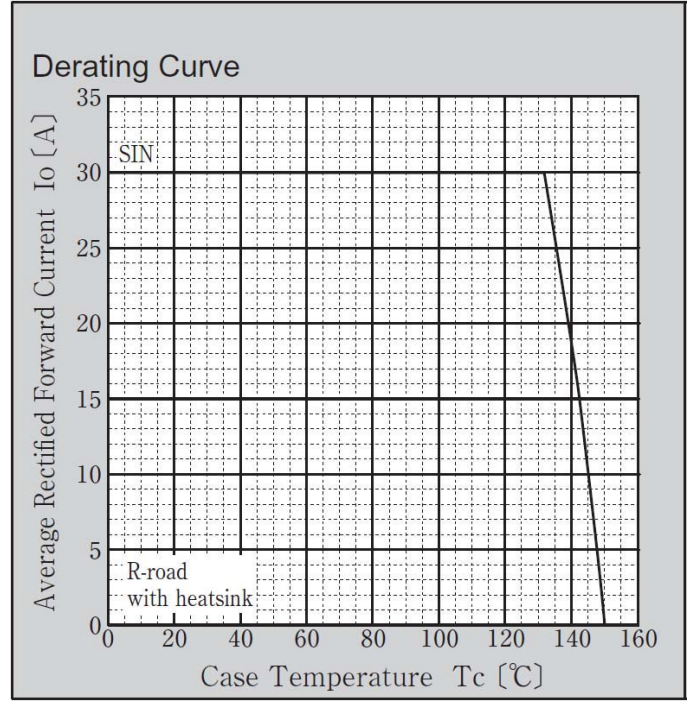
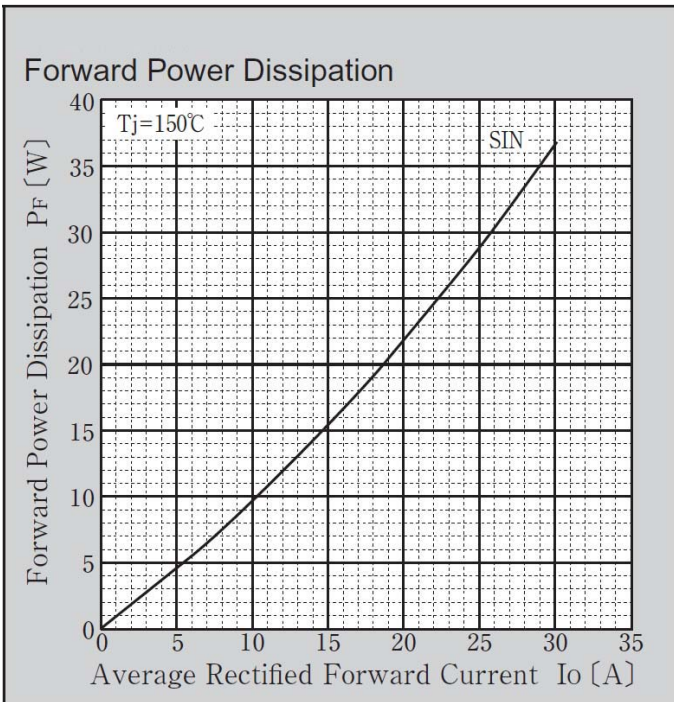
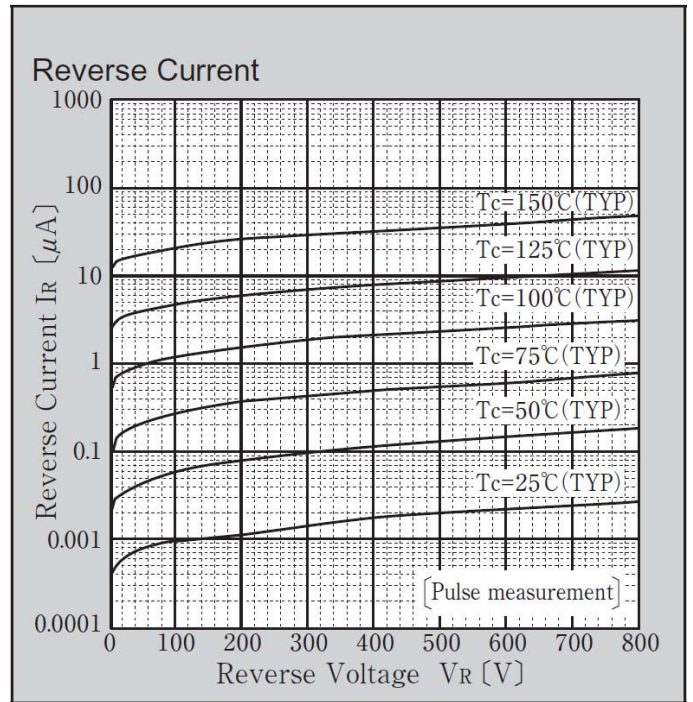
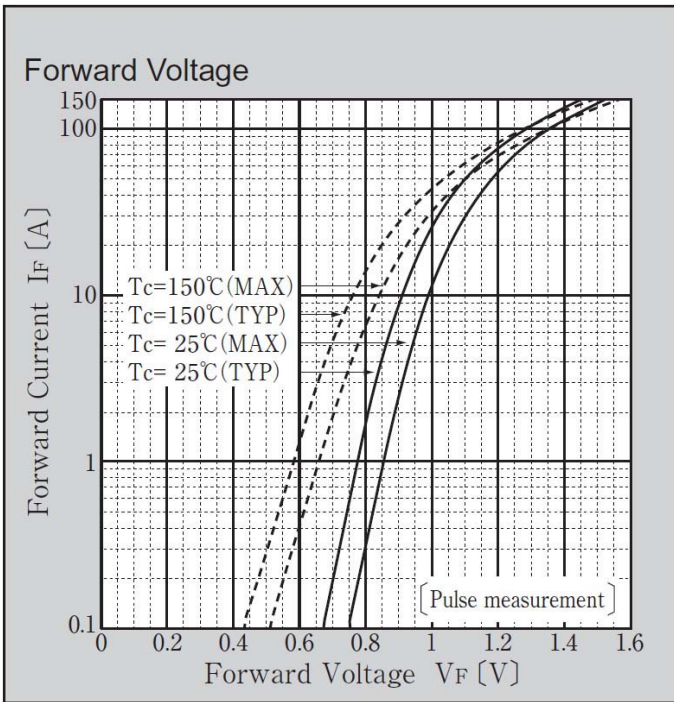
* :See the original Specifications

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

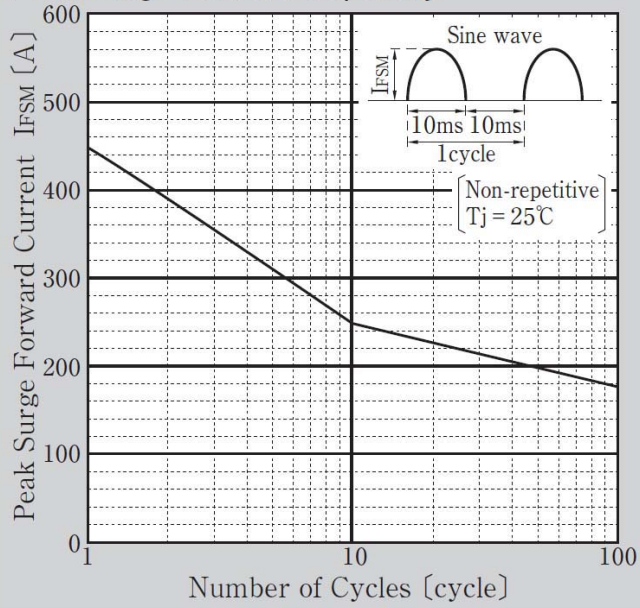
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	I _F =30A, Pulse measurement			1.1	V
Reverse current	I _R	V _R =800V, Pulse measurement			10	μA
Thermal resistance	R _{th(j-c)}	Junction to case, With heatsink			0.5	°C/W

* : See the original Specifications

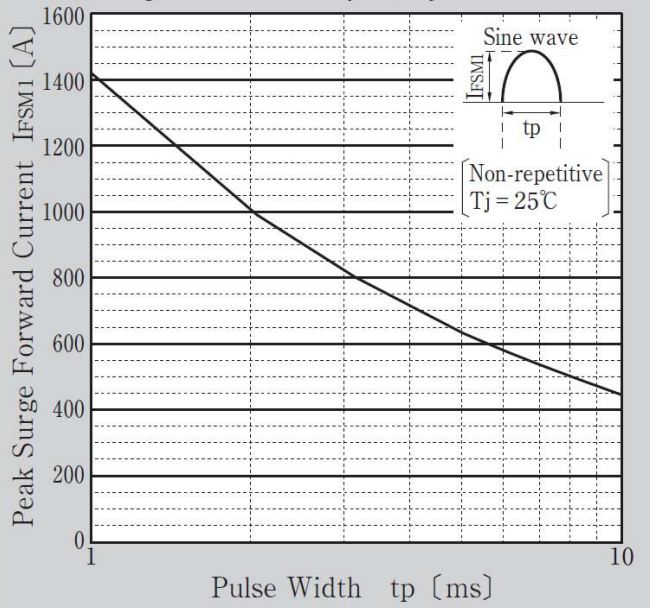
CHARACTERISTIC DIAGRAMS



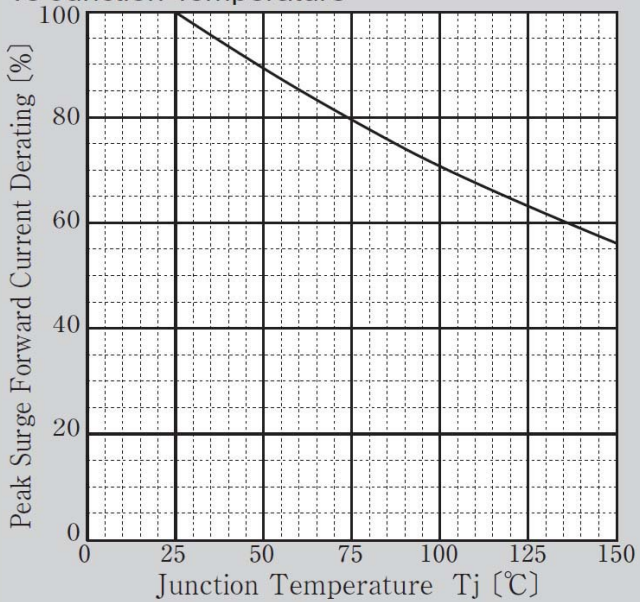
Peak Surge Forward Capability



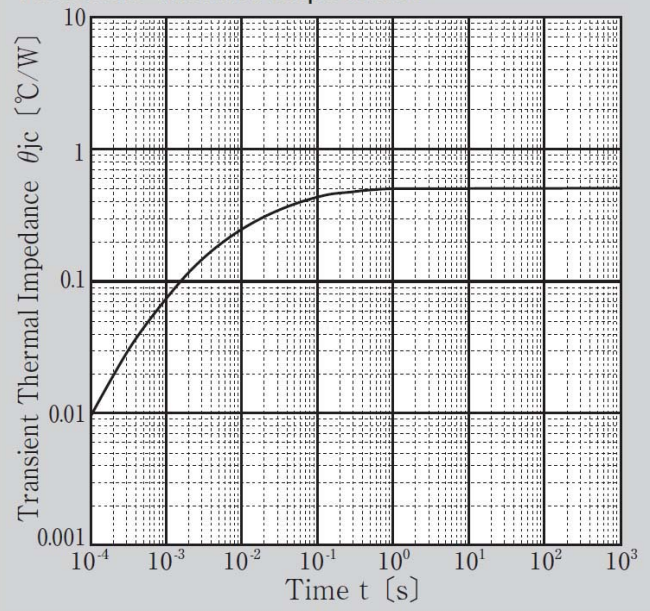
Peak Surge Forward Capability



Peak Surge Forward Current Derating vs Junction Temperature

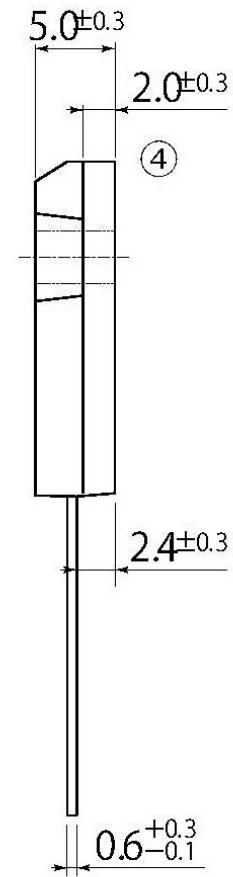
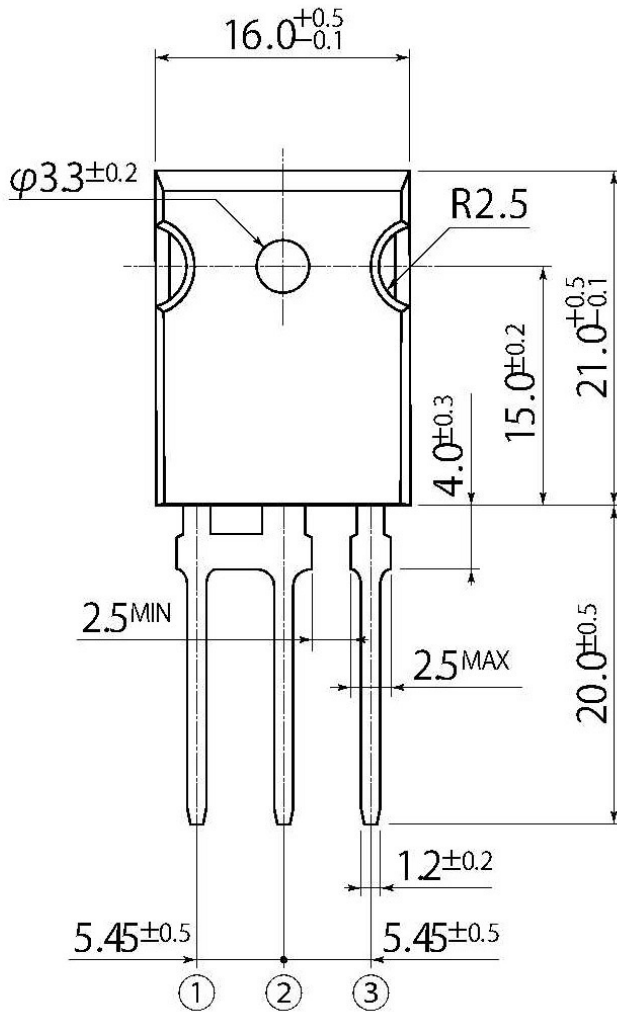


Transient Thermal Impedance



K6

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



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