

S60L120V

Fast Recovery Diodes 1200V, 60A

Feature

- High Voltage
- High Recovery Speed
- Pb free terminal
- RoHS:Yes

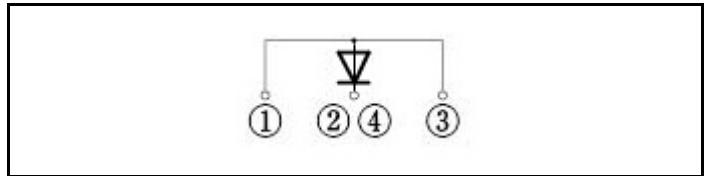
OUTLINE

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		-55 to 150	°C
Repetitive peak reverse voltage	V _{RRM}		1200	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, With heatsink, T _c =63°C	60	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, Sine wave, Non-repetitive, Peak value, T _j =25°C	1020	A
Mounting torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

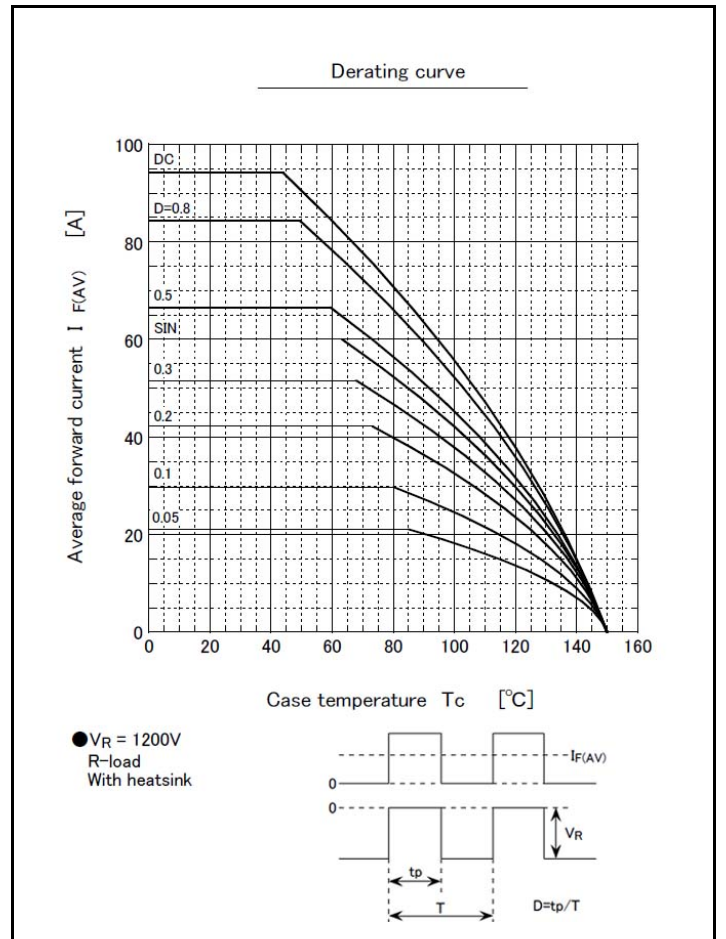
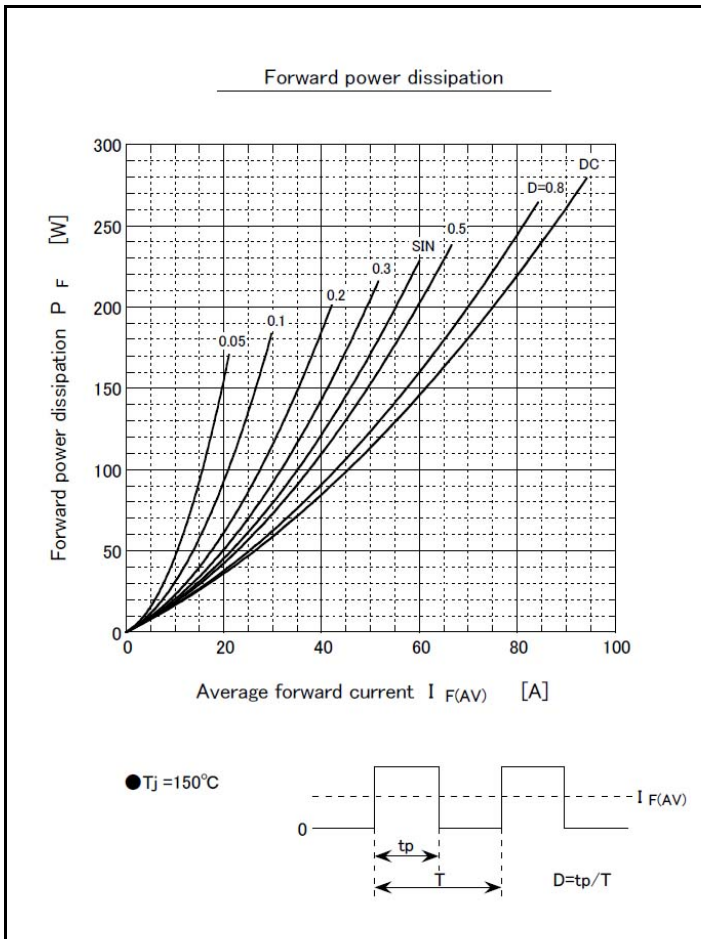
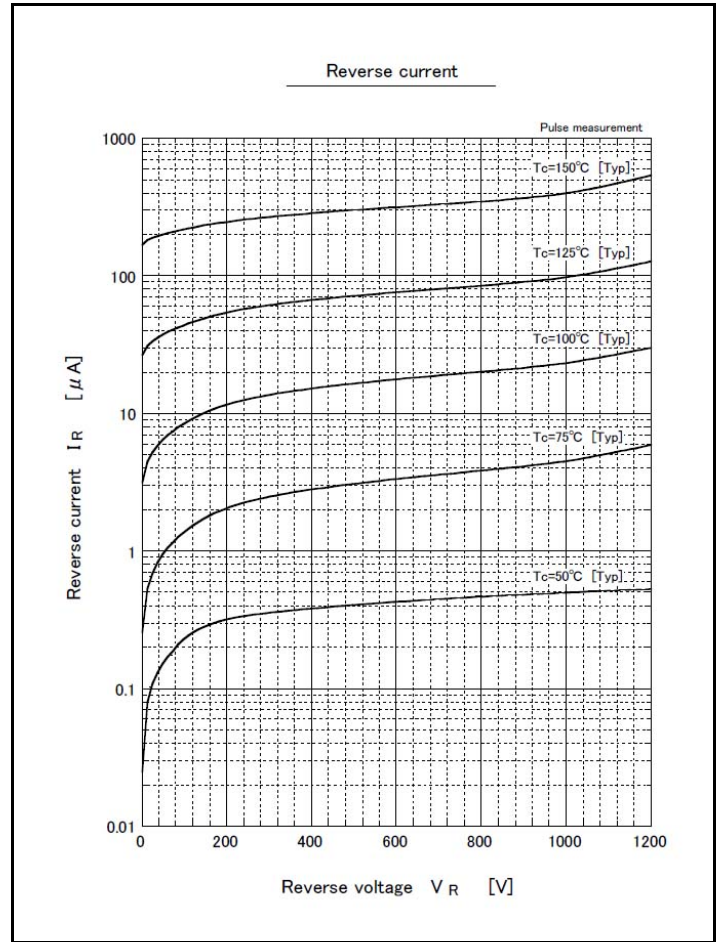
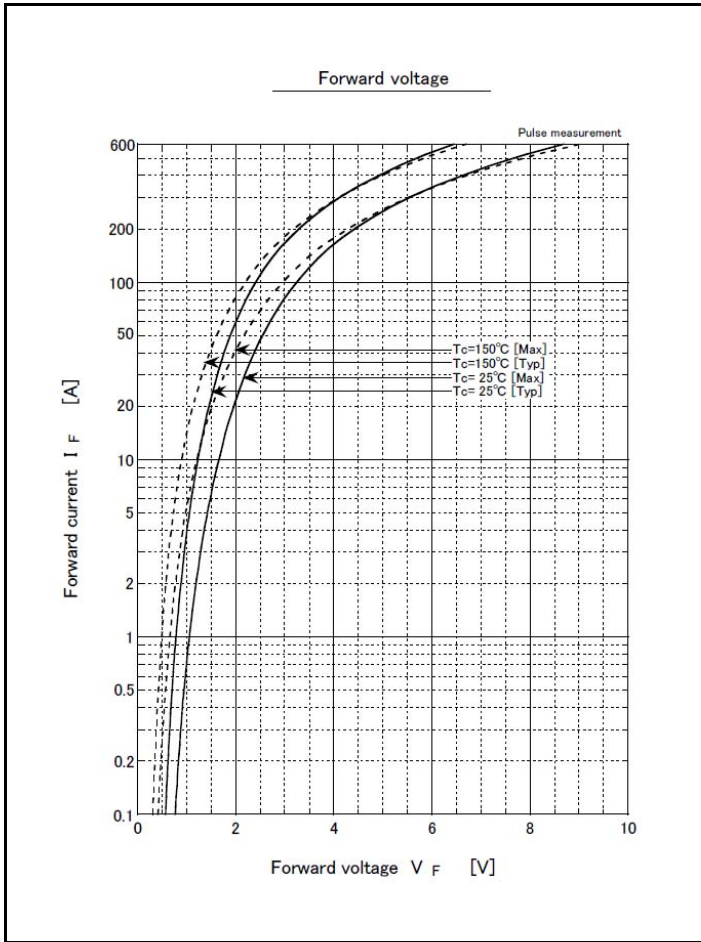
* : See the original Specifications

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

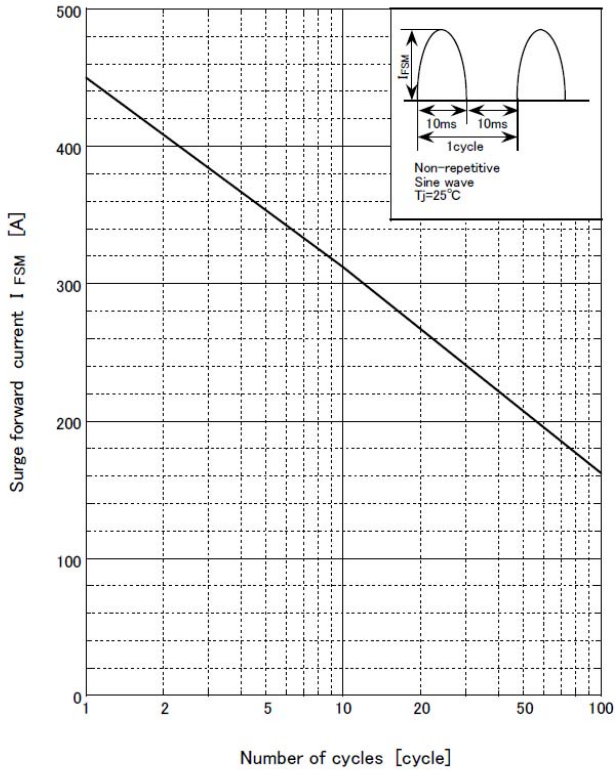
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	I _F =60A, Pulse measurement			2.7	V
Reverse current	I _R	V _R =1200V, Pulse measurement			100	μA
Reverse recovery time	t _{rr}	I _F =0.5A, I _R =1A, 0.25I _R			300	ns
Total capacitance	C _t	f=1MHz, V _R =10V		206		pF
Thermal resistance	R _{th(j-c)}	Junction to case, With heatsink			0.38	°C/W

* :See the original Specifications

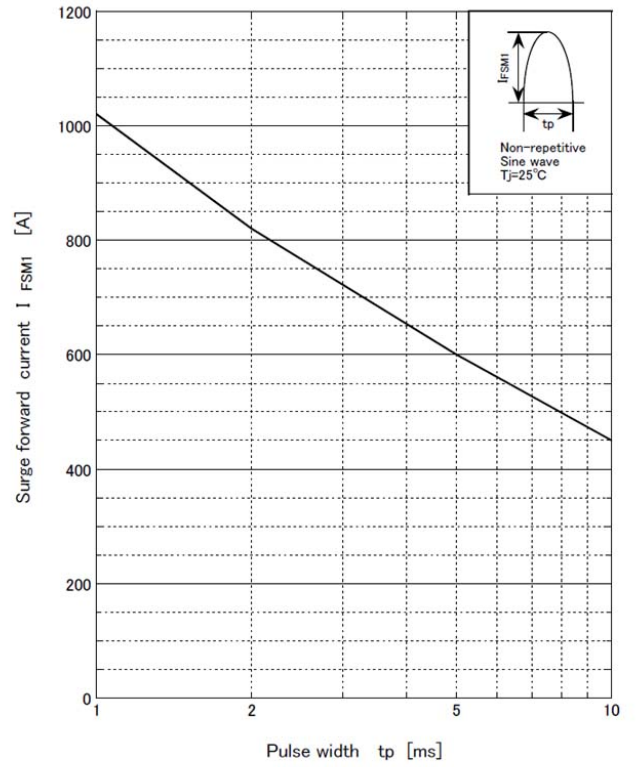
CHARACTERISTIC DIAGRAMS



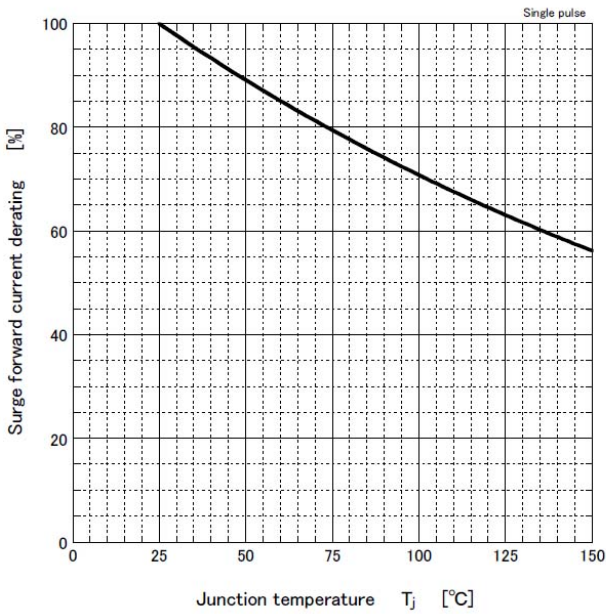
Surge forward current capability



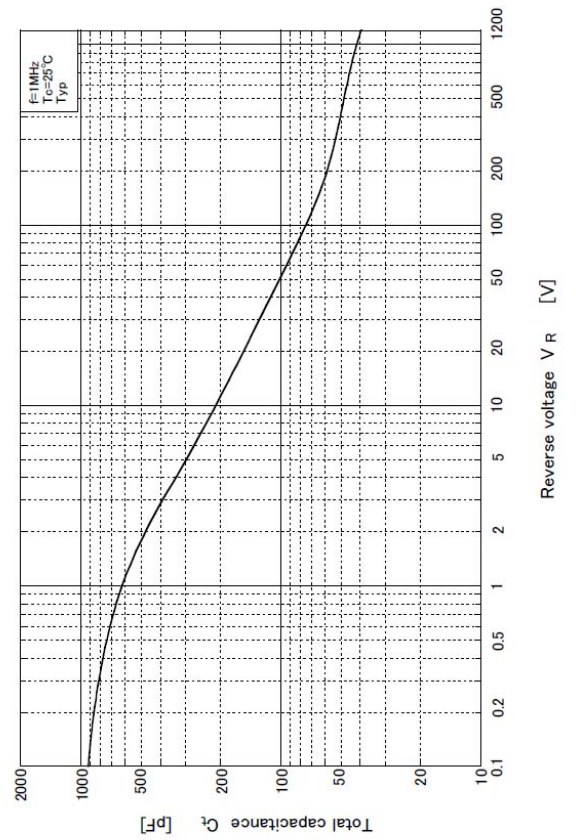
Surge forward current capability



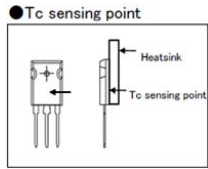
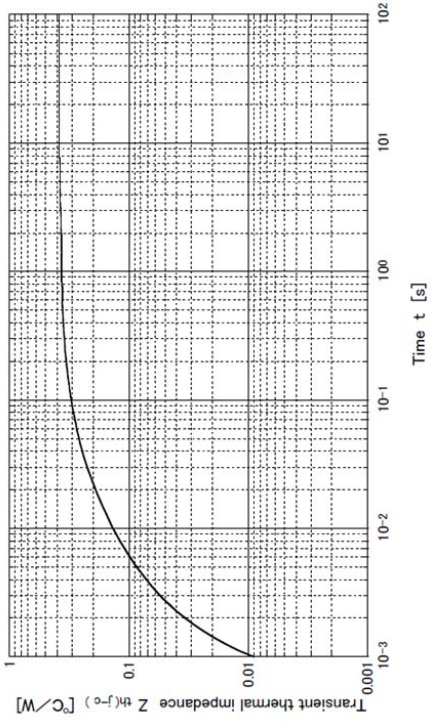
Surge forward current derating vs Junction temperature



Total capacitance

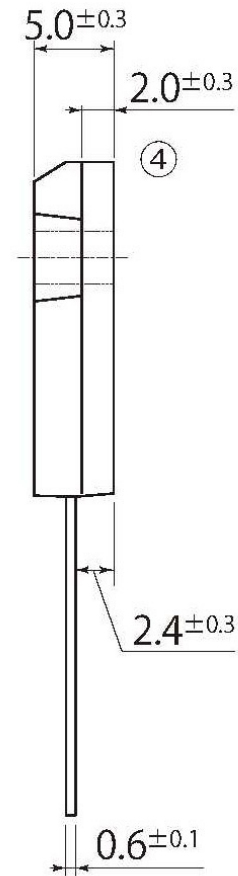
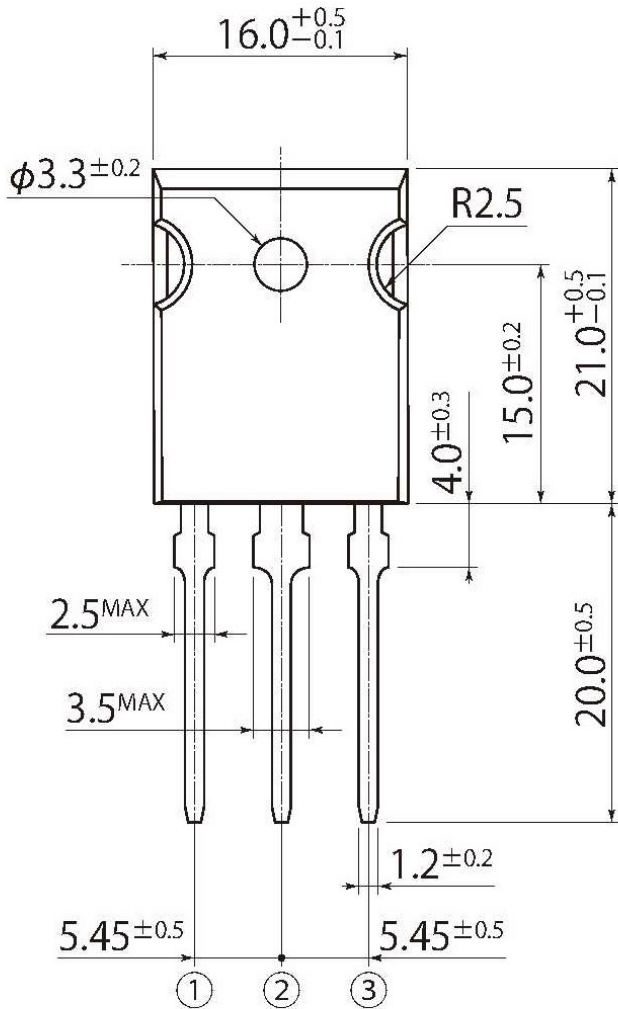


Transient thermal impedance



K7

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



Notes

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