

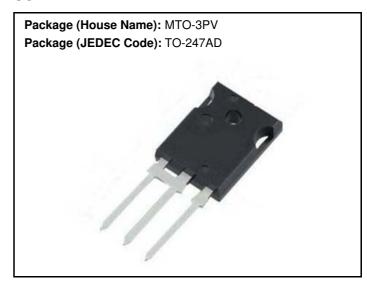
S30K60V

Fast Recovery Diodes 600V, 30A

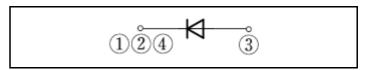
Feature

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

OUTLINE



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	°C
Junction temperature	Tj		150	°C
Repetitive peak reverse voltage	V_{RRM}		600	V
Average forward current	I _F (AV)	50Hz sine wave, Resistance load, Tc=108°C	30	Α
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle, Peak value, Tj=25°C	450	А
Surge forward current	I _{FSM1}	tp=1ms, Sine wave, Non-repetitive, 1 cycle, Peak value, Tj=25°C	1423	Α
Mounting torque	TOR	(Recommended torque : 0.5N·m)	0.8	N∙m

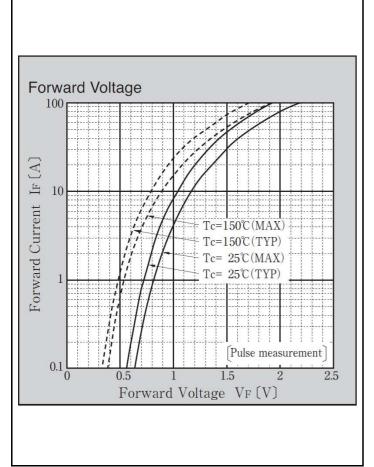
^{* :} See the original Specifications

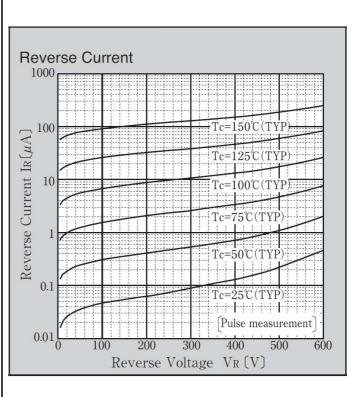
Electrical Characteristics (unless otherwise specified : Tc=25°C)

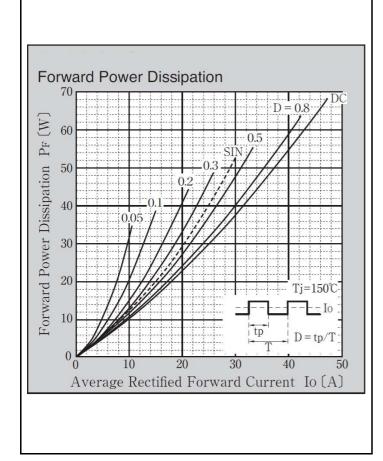
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	Oiiit
Forward voltage	V _F	IF=30A, Pulse measurement		1.33	1.5	V
Forward voltage	V _F	IF=3A, Pulse measurement		0.84		V
Reverse current	I _R	VR=600V, Pulse measurement			10	μΑ
Reverse recovery time	trr	IF=0.5A, IR=1A, 0.25IR			100	ns
Reverse recovery time	trr	IF=1.0A, VR=30V, di/dt=-50A/μs, 0.25IR			74	ns
Reverse recovery time	trr	IF=1.0A, VR=420V, di/dt=-50A/μs, 0.25IR			88	ns
Total capacitance	Ct	f=1MHz, VR=10V		154		pF
Thermal resistance	Rth(j-c)	Junction to case			0.8	°C/W

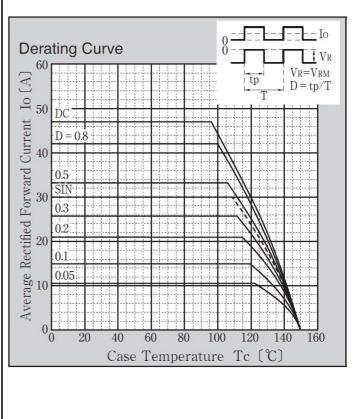
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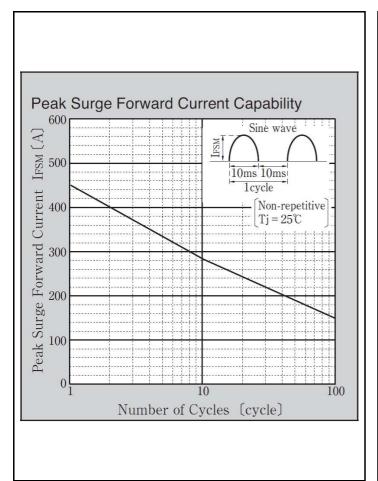
CHARACTERISTIC DIAGRAMS

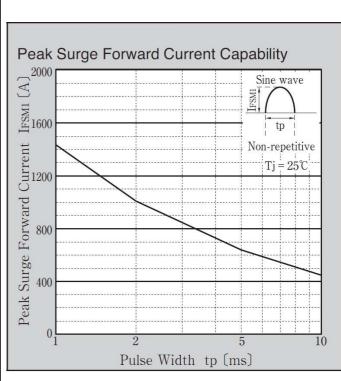


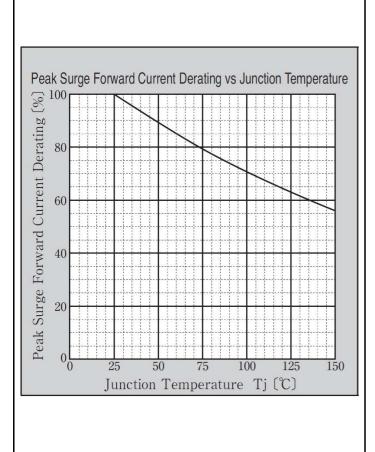


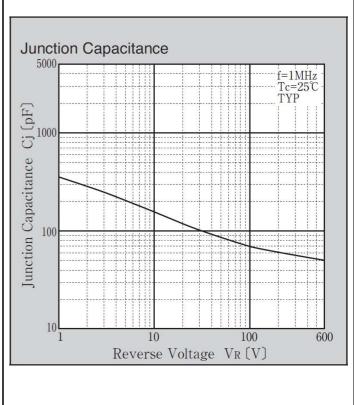


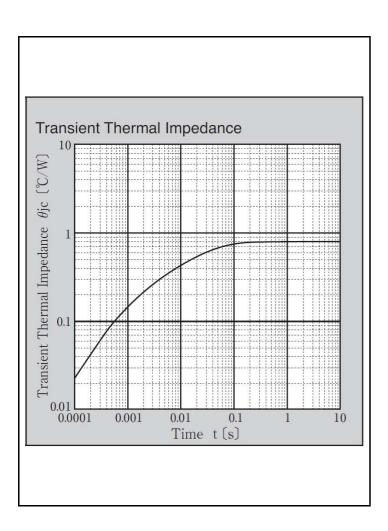








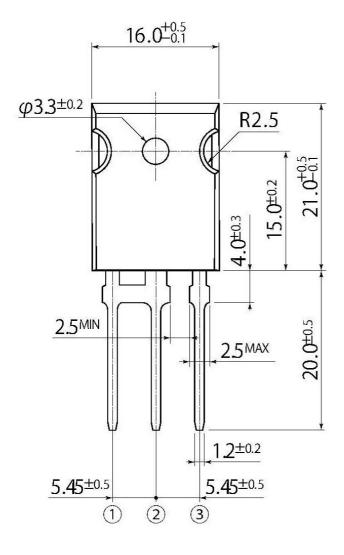


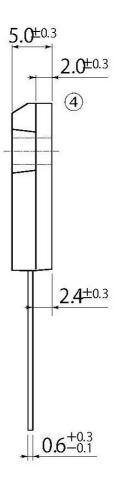


scale: 2/1

K6

JEDEC Code	TO-247AD
JEITA Code	1
House Name	MTO-3PV





Notes

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