

S30K60T

Fast Recovery Diodes

600V, 30A

Feature

- High Voltage
- Low Noise
- Pb free terminal
- RoHS:Yes

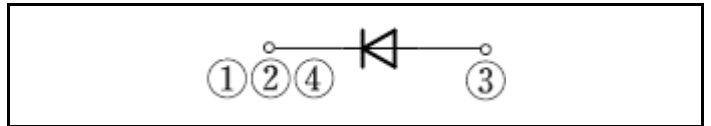
OUTLINE

Package (House Name): MTO-3PT

Package (JEDEC Code): TO-247AD



Equivalent circuit



Absolute Maximum Ratings (unless otherwise specified : T_c=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}		600	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, With heatsink, T _c =108°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, Sine wave, Non-repetitive, Peak value, T _j =25°C	1320	A
Mounting torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

※ : See the original Specifications

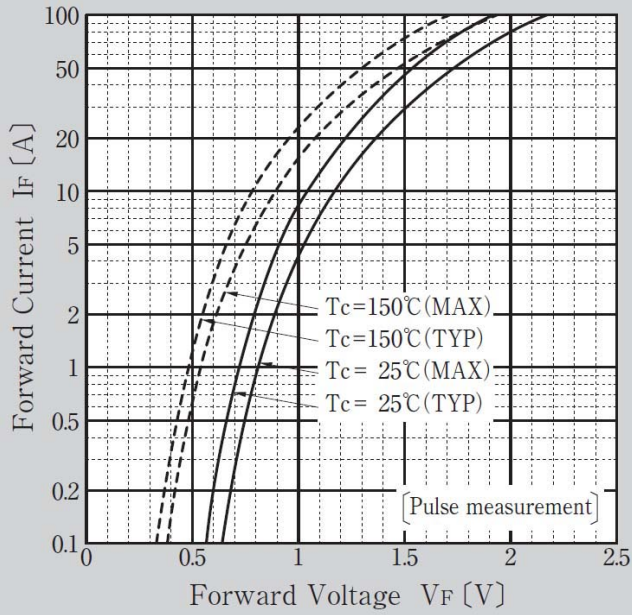
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	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	μ A
Reverse recovery time	trr	IF=0.5A, IR=1.0A, 0.25IR			100	ns
Reverse recovery time	trr	IF=1A, VR=30V, di/dt=-50A/ μ s, 0.25IR			74	ns
Reverse recovery time	trr	IF=1A, VR=420V, di/dt=-50A/ μ s, 0.25IR			88	ns
Total capacitance	Ct	f=1MHz, VR=10V		154		pF
Thermal resistance	Rth(j-c)	Junction to case, With heatsink			0.8	$^{\circ}$ C/W

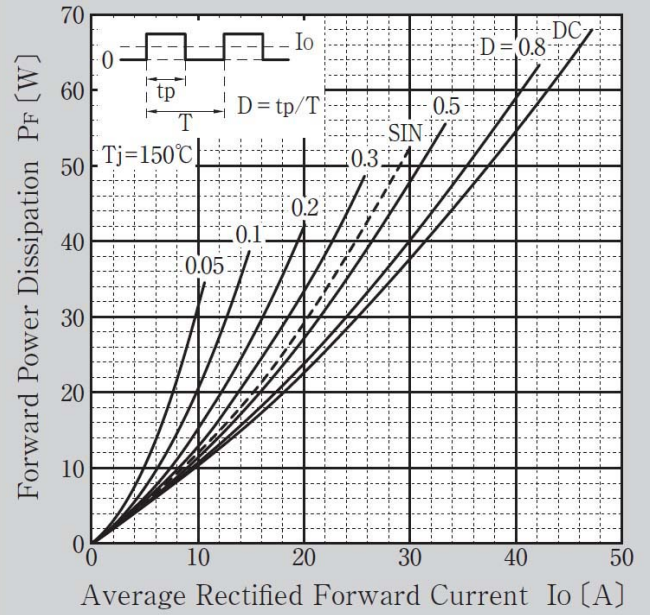
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

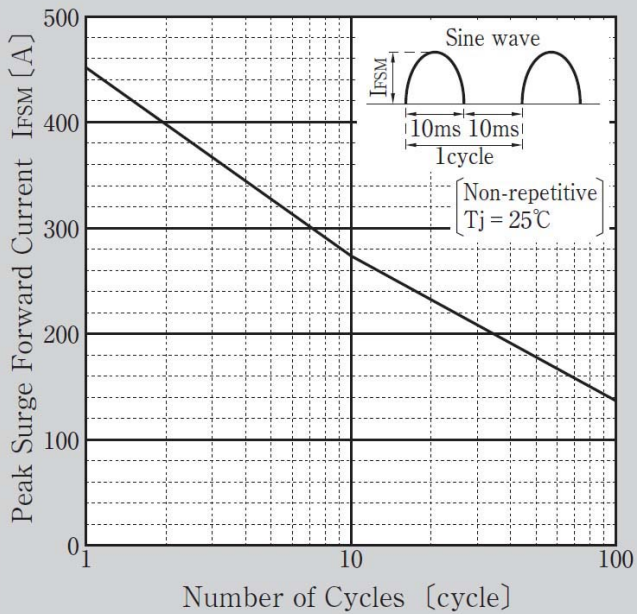
Forward Voltage



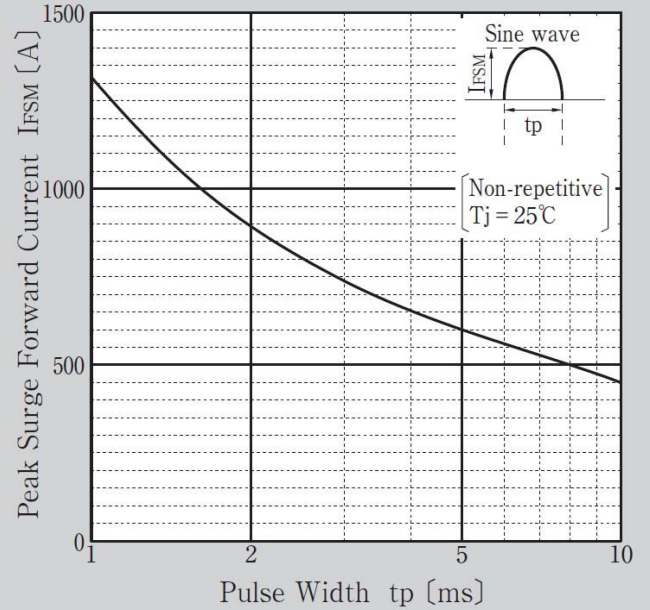
Forward Power Dissipation

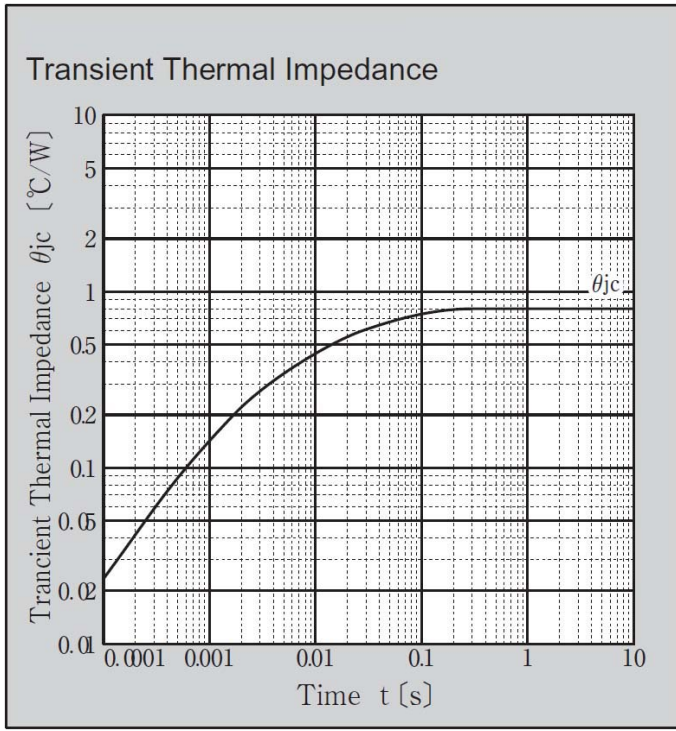
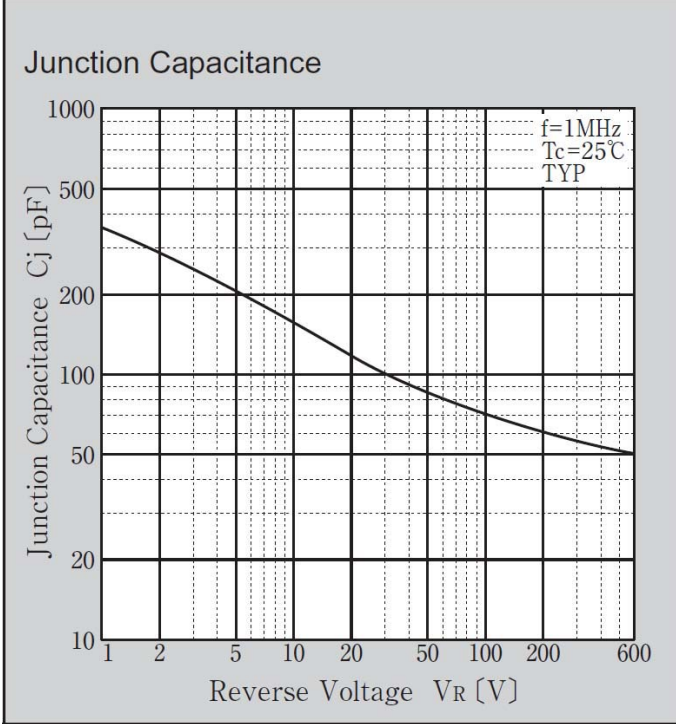
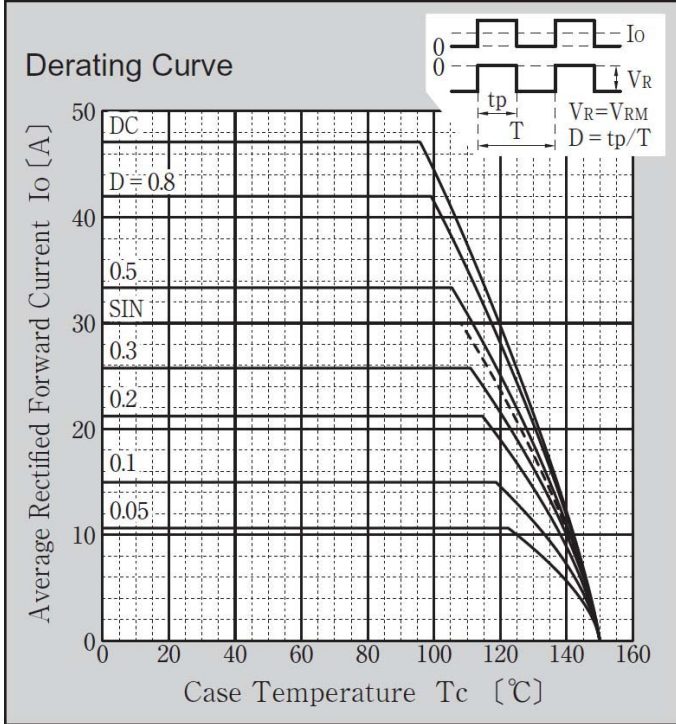


Peak Surge Forward Current Capability



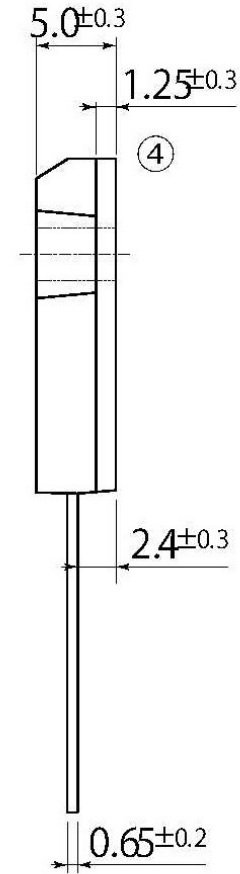
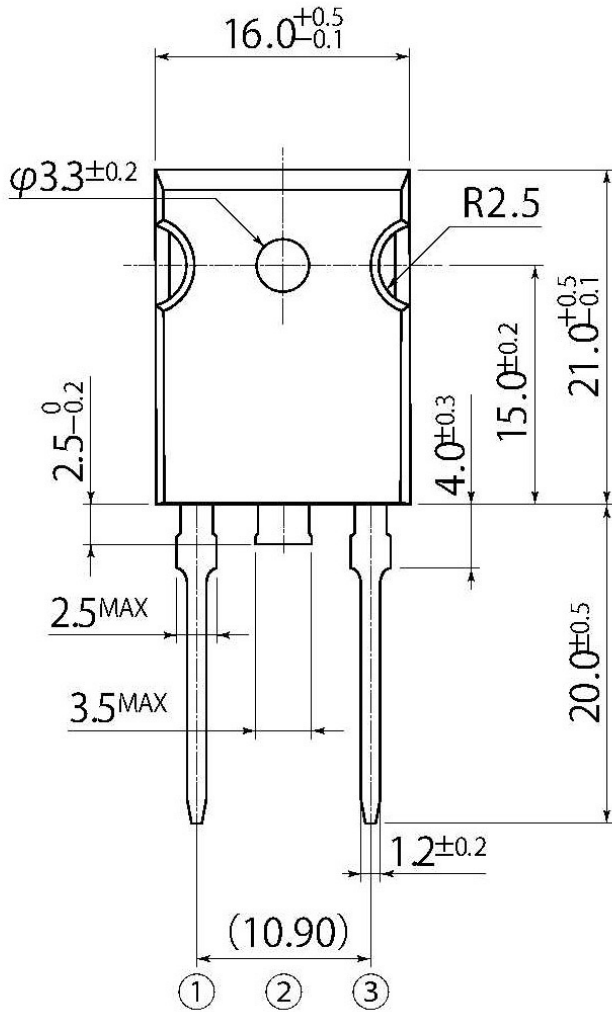
Peak Surge Forward Current Capability





K2

JEDEC Code	TO-247AD
JEITA Code	-
House Name	MTO-3PT(2pin)



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