

S20K60T

Fast Recovery Diodes

600V, 20A

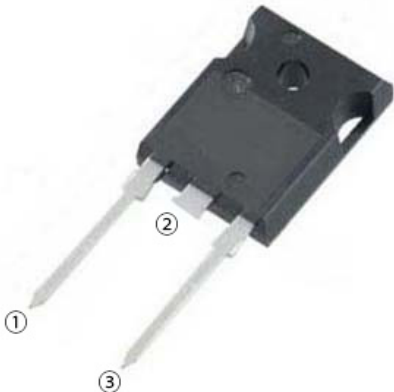
Feature

- 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 : Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	°C
Junction temperature	Tj		-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, Tc=121°C	20	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle, Peak value, Tj=25°C	300	A
Surge forward current	I _{FSM1}	tp=1ms, Sine wave, Non-repetitive, Peak value, Tj=25°C	890	A
Mounting torque	TOR	(Recommended torque : 0.5N・m)	0.8	N・m

※ :See the original Specifications

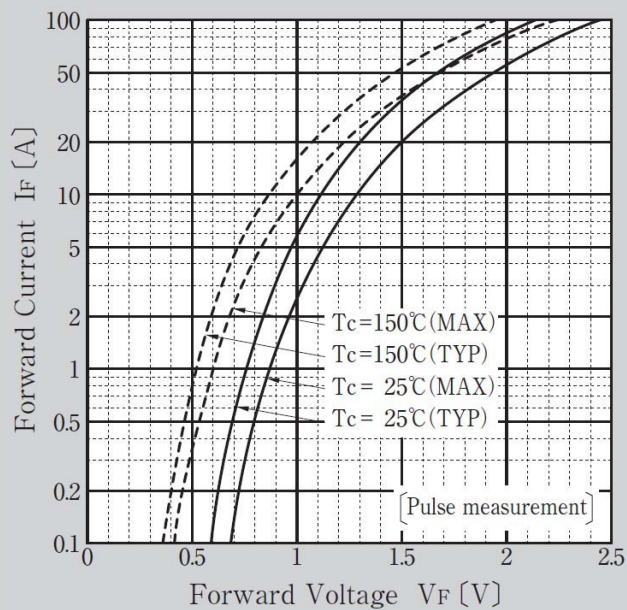
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=20A, Pulse measurement		1.3	1.5	V
Forward voltage	V_F	IF=2A, Pulse measurement		0.83		V
Reverse current	I_R	VR=600V, Pulse measurement			10	μA
Reverse recovery time	trr	IF=0.5A, IR=1.0A, 0.25IR			95	ns
Reverse recovery time	trr	IF=1.0A, VR=30V, di/dt=-50A/μs, 0.25IR			72	ns
Reverse recovery time	trr	IF=1.0A, VR=420V, di/dt=-50A/μs, 0.25IR			84	ns
Total capacitance	Ct	f=1MHz, VR=10V		105		pF
Thermal resistance	Rth(j-c)	Junction to case, With heatsink			0.8	°C/W

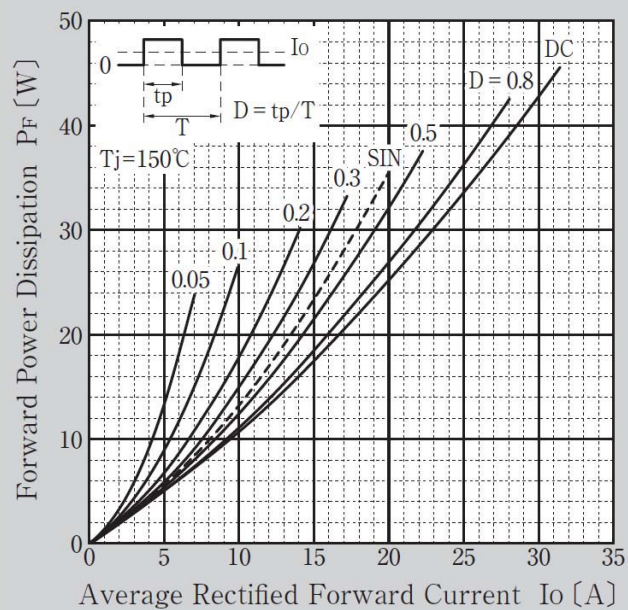
※ : See the original Specifications

CHARACTERISTIC DIAGRAMS

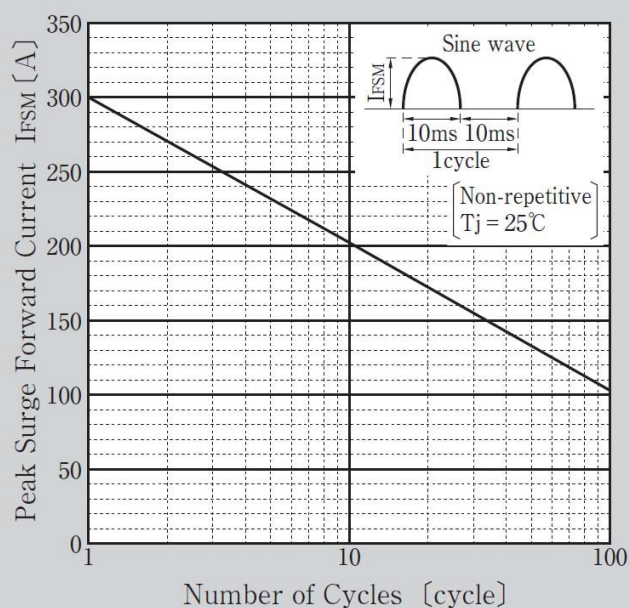
Forward Voltage



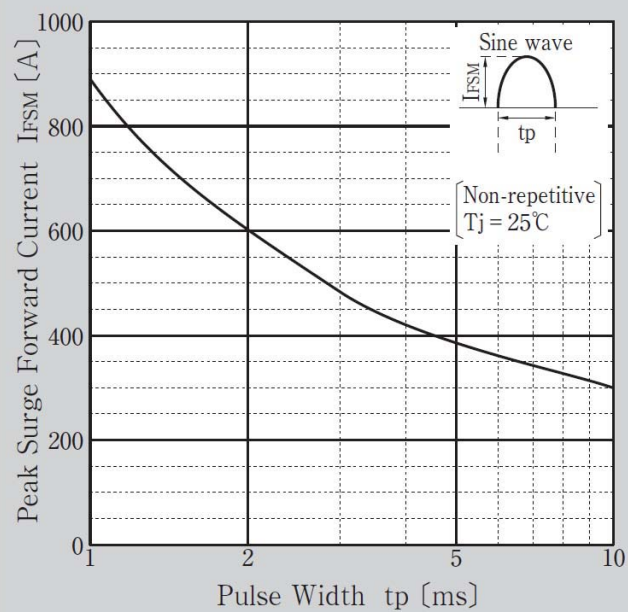
Forward Power Dissipation



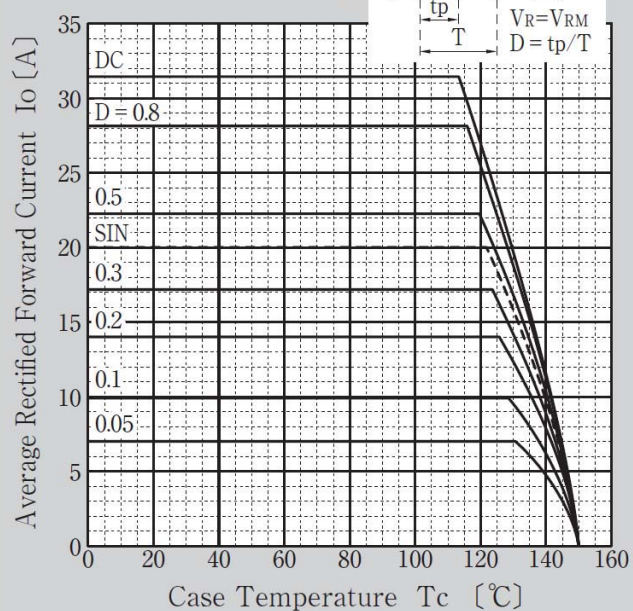
Peak Surge Forward Current Capability



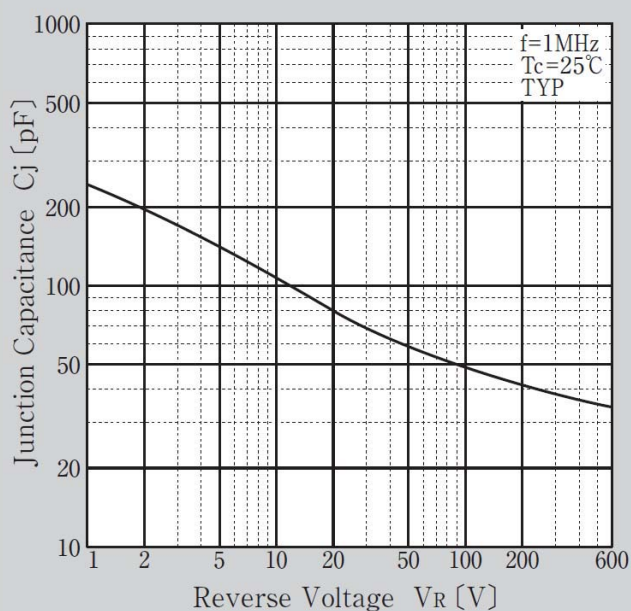
Peak Surge Forward Current Capability



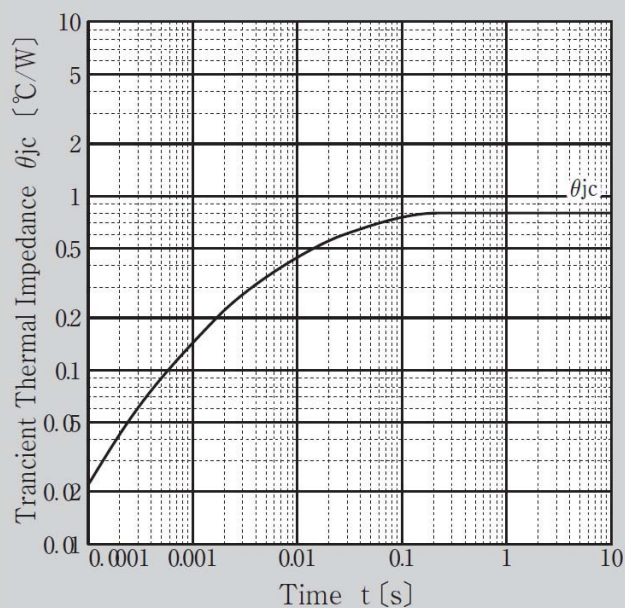
Derating Curve



Junction Capacitance

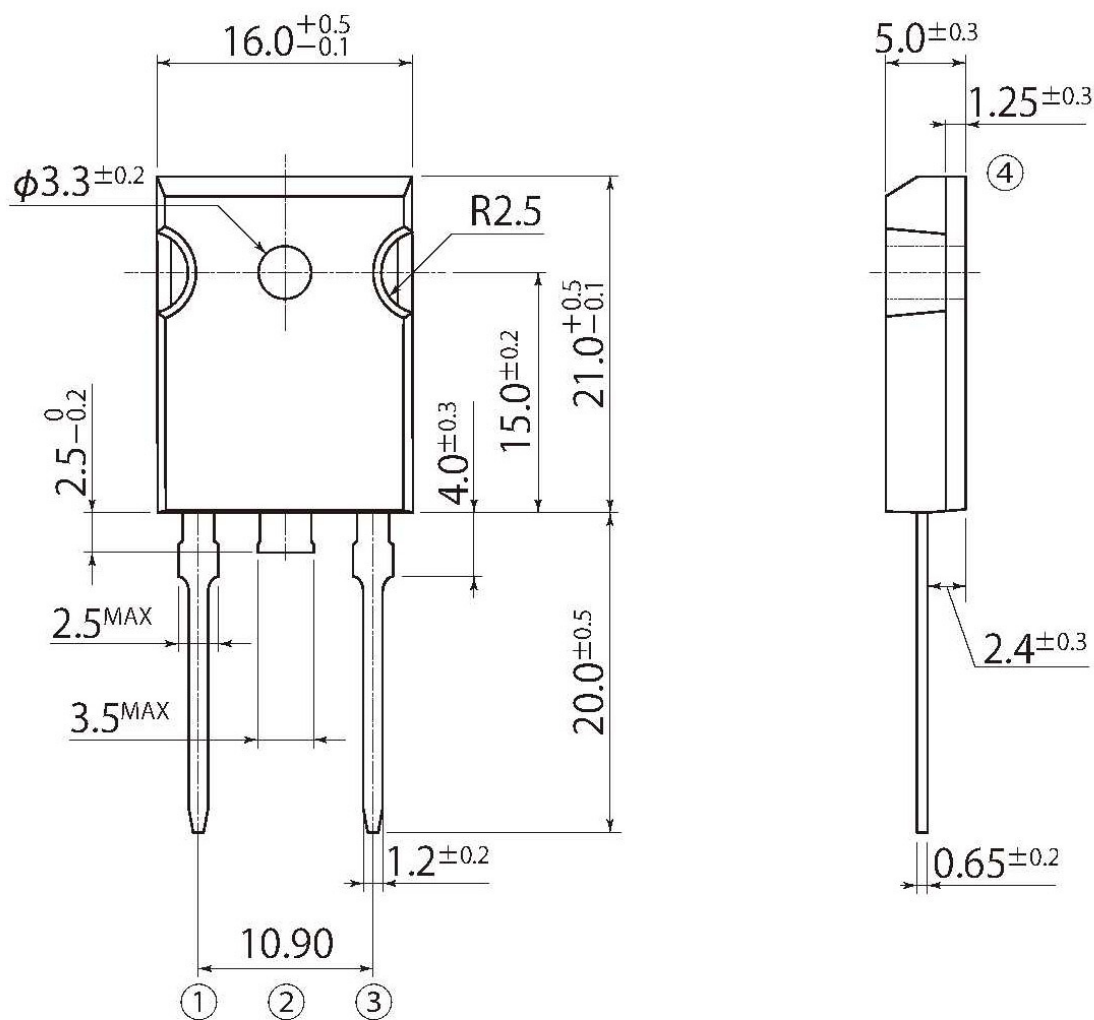


Transient Thermal Impedance



K2

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



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