

S30SC6MT

Schottky Barrier Diodes
60V, 30A

Feature

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

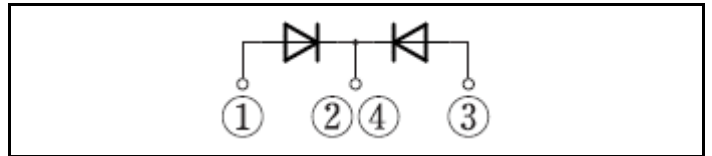
OUTLINE

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 temperature	T _{stg}		-55 to 150	°C
Junction temperature	T _j		150	°C
Repetitive peak reverse voltage	V _{RRM}		60	V
Repetitive peak surge reverse voltage	V _{RRSM}	Pulse width 0.5ms, duty=1/40	65	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, Rating for each diode I _{F(AV)} /2, T _c =129°C	30	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, T _j =25°C	300	A
Mounting torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

※ :See the original Specifications

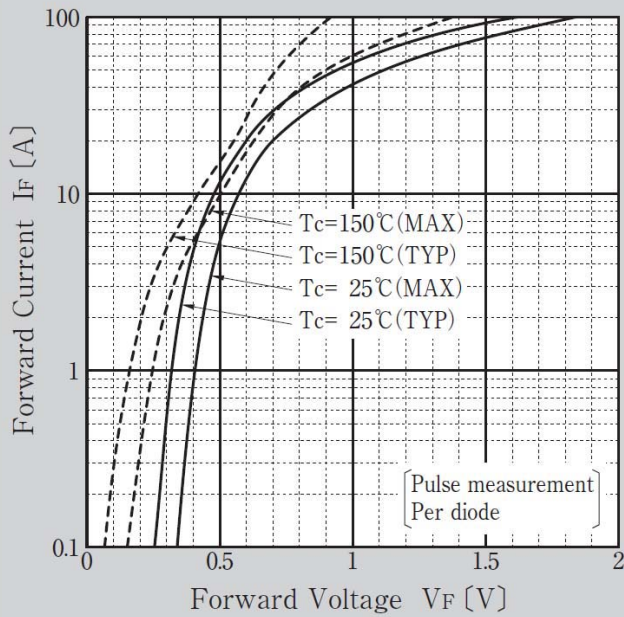
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	I _F =15A, Pulse measurement, per diode		0.54	0.61	V
Reverse current	I _R	V _R =60V, Pulse measurement, per diode			1.2	mA
Total capacitance	C _t	f=1MHz, V _R =10V, per diode		385		pF
Thermal resistance	R _{th(j-c)}	Junction to case			0.8	°C/W

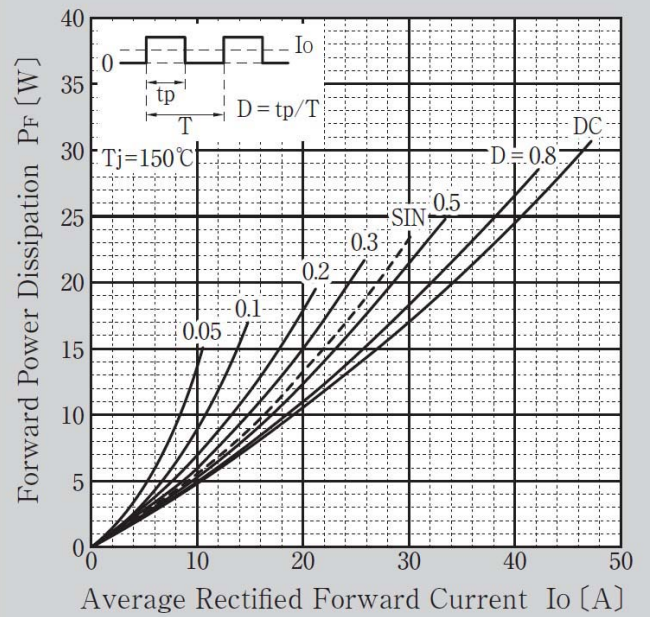
* : See the original Specifications

CHARACTERISTIC DIAGRAMS

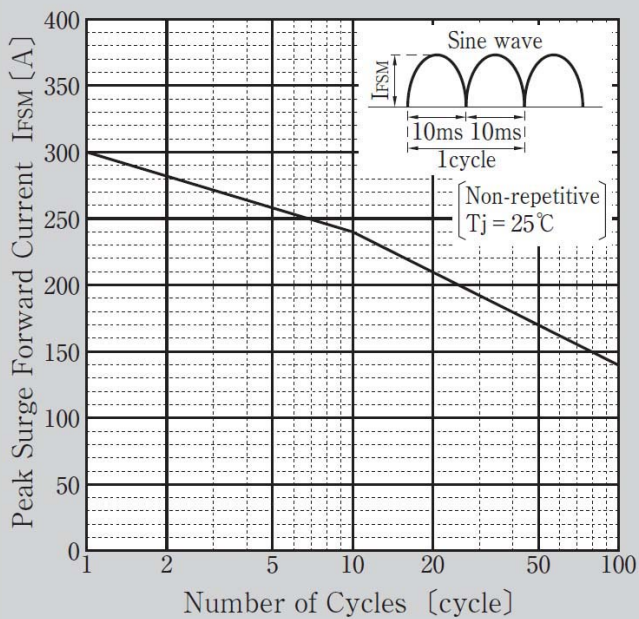
Forward Voltage



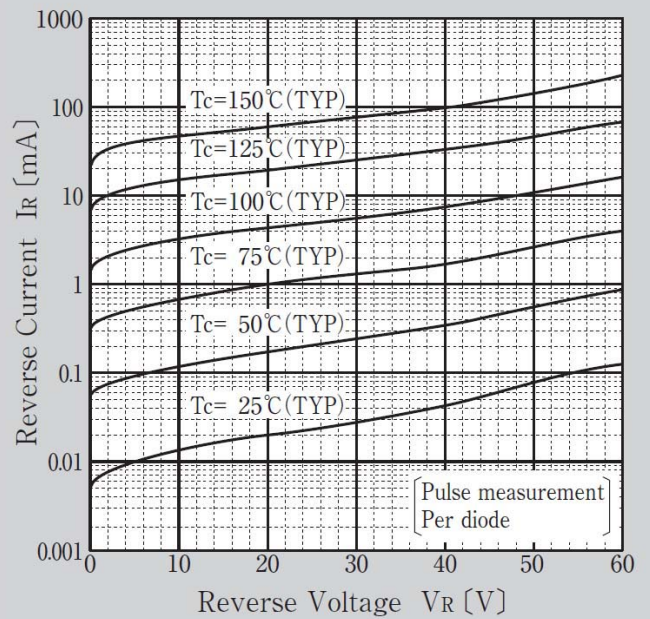
Forward Power Dissipation



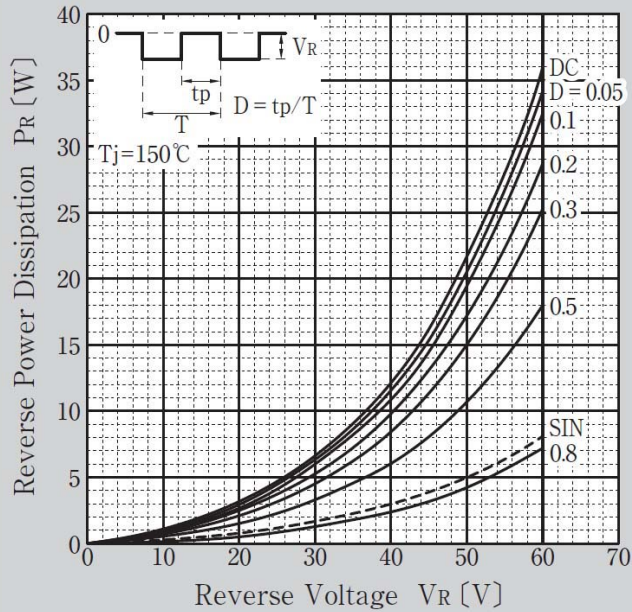
Peak Surge Forward Current Capability



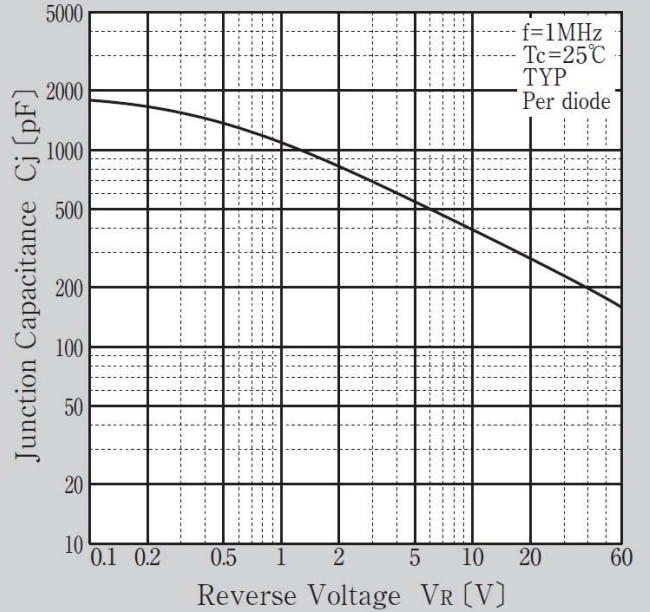
Reverse Current



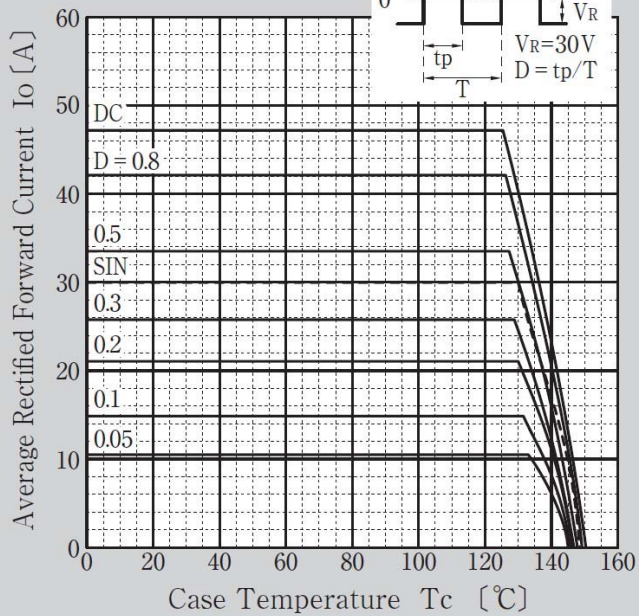
Reverse Power Dissipation



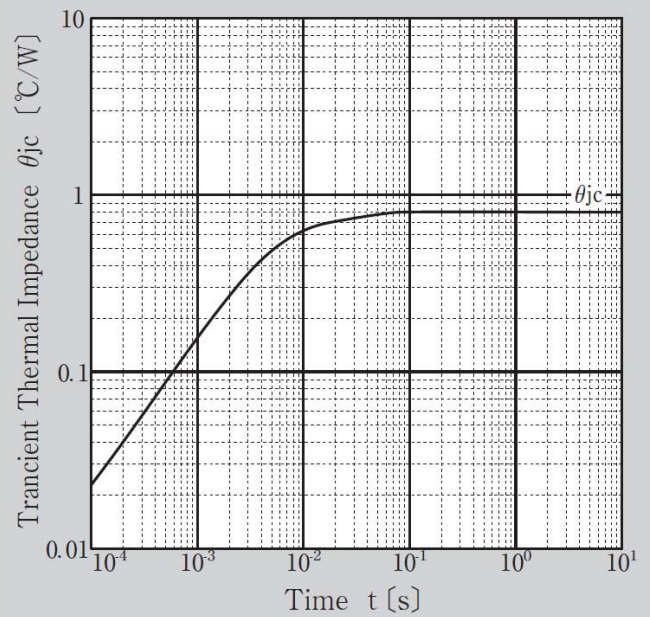
Junction Capacitance



Derating Curve

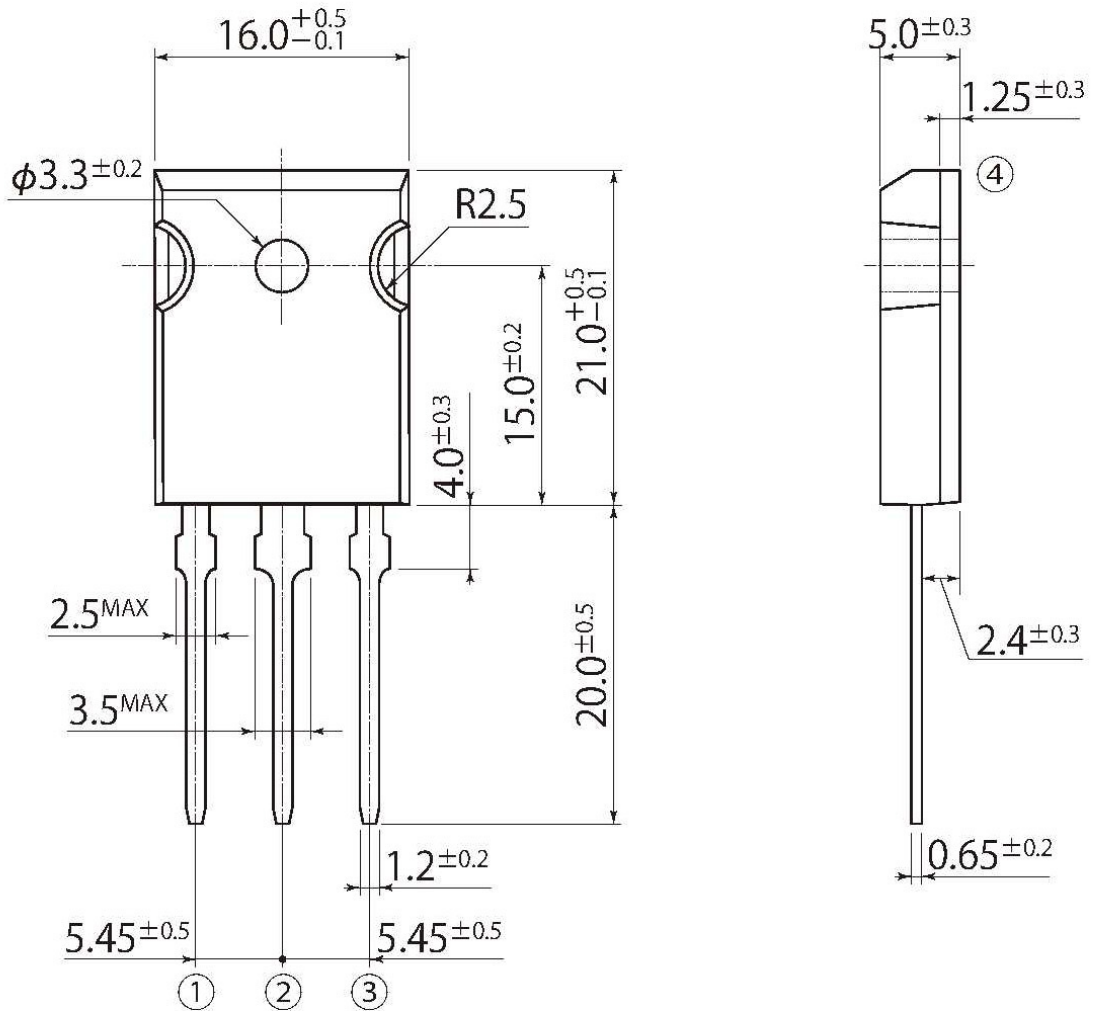


Transient Thermal Impedance



K5

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



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