

S60SC6MT

Schottky Barrier Diodes

60V, 60A

Feature

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

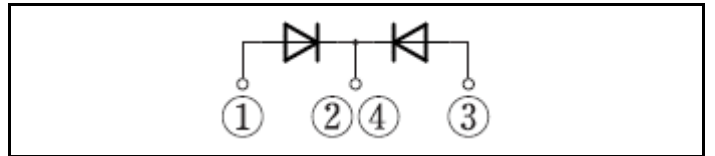
OUTLINE

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		-55 to 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, With heatsink, T _c =121 °C	60	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, T _j =25°C	470	A
Mounting torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

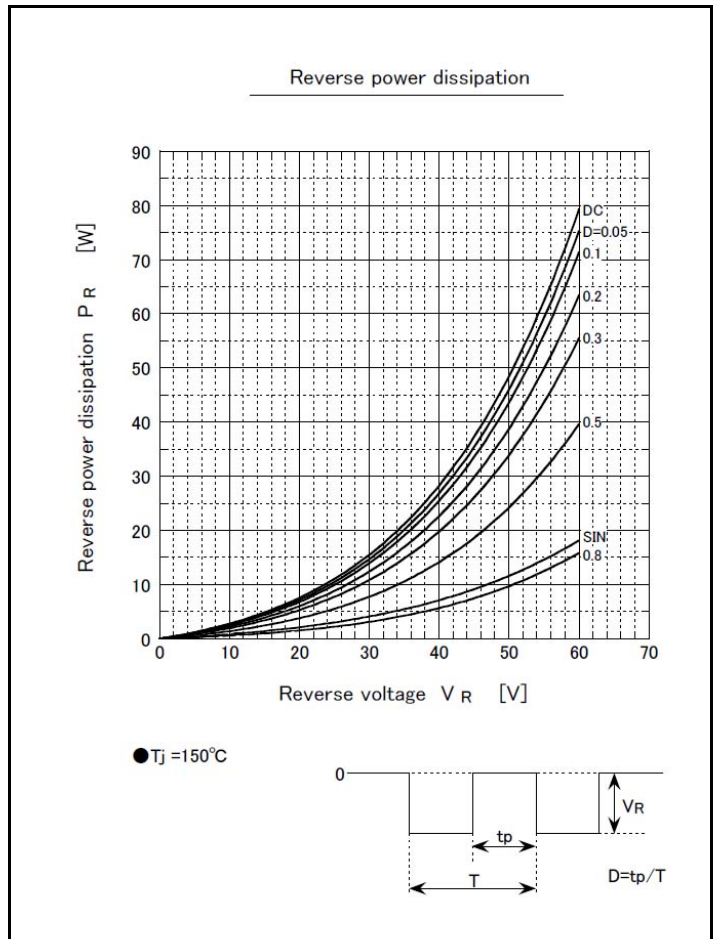
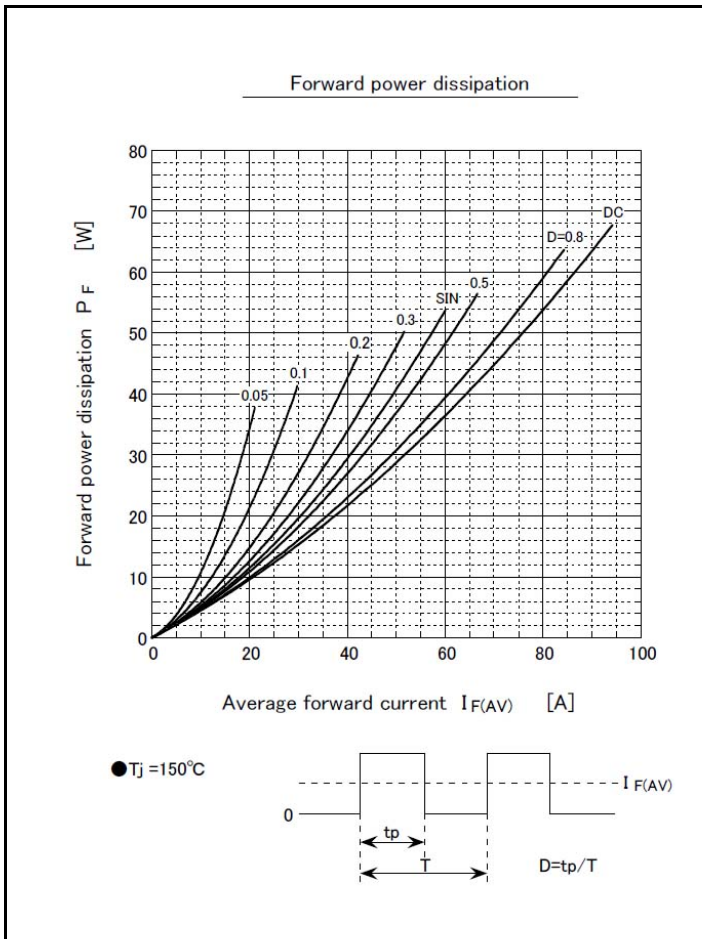
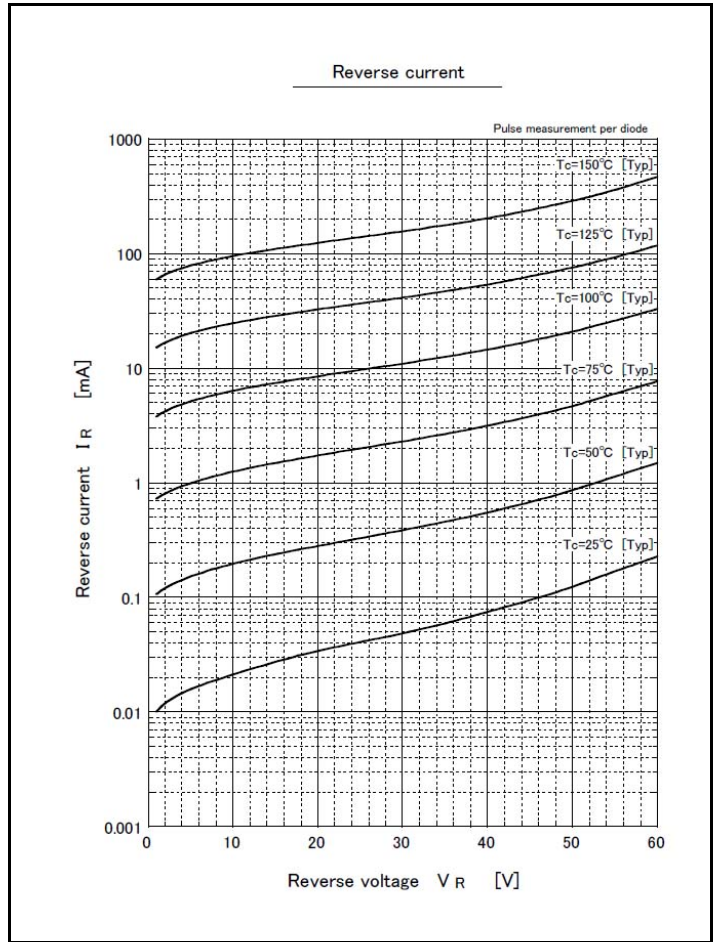
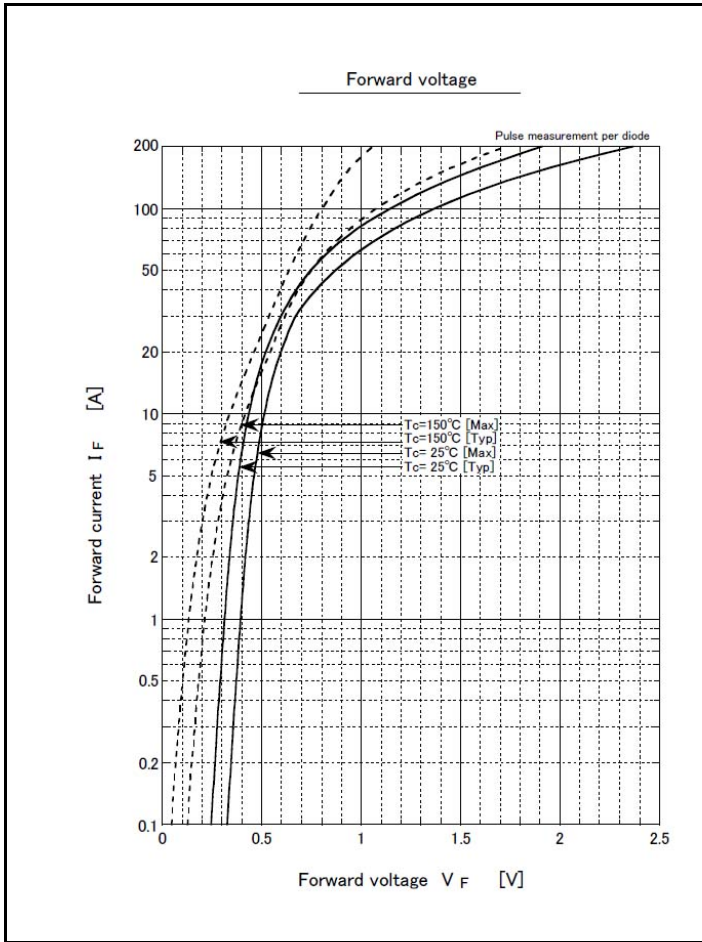
※ :See the original Specifications

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

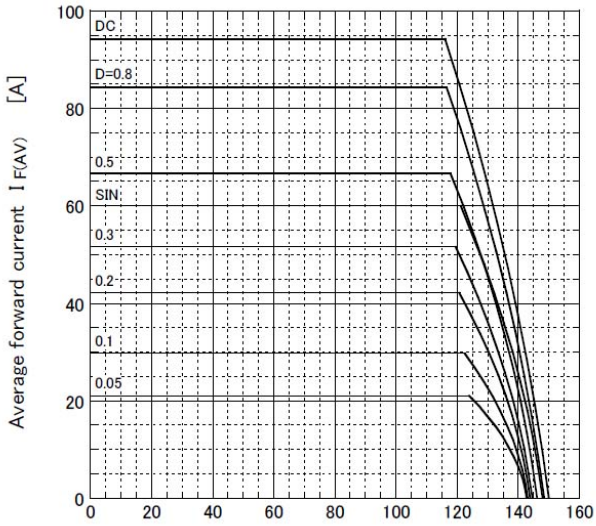
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	I _F =30A, Pulse measurement, per diode		0.6	0.67	V
Reverse current	I _R	V _R =60V, Pulse measurement, per diode			2	mA
Total capacitance	C _t	f=1MHz, V _R =10V, per diode		640		pF
Thermal resistance	R _{th(j-c)}	Junction to case, With heatsink			0.5	°C/W

* : See the original Specifications

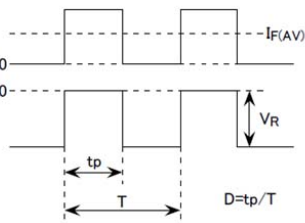
CHARACTERISTIC DIAGRAMS



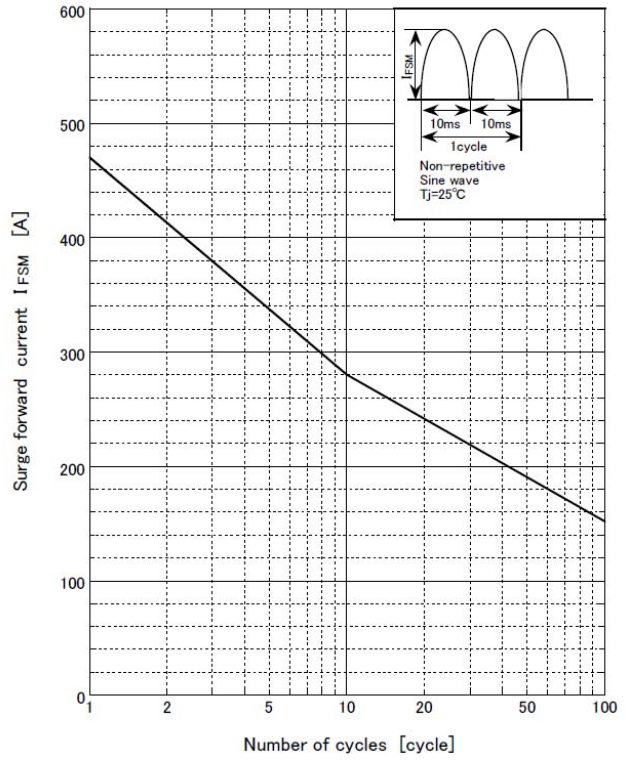
Derating curve



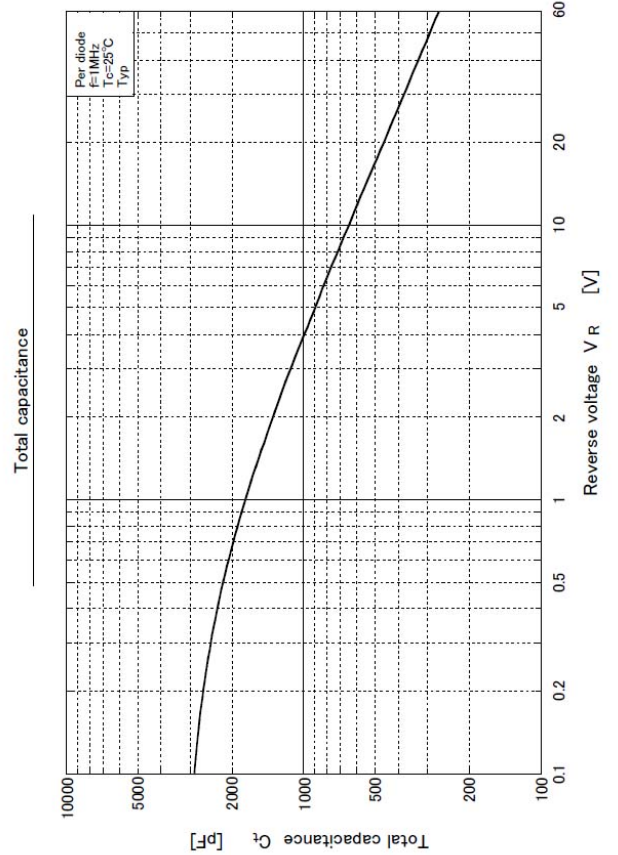
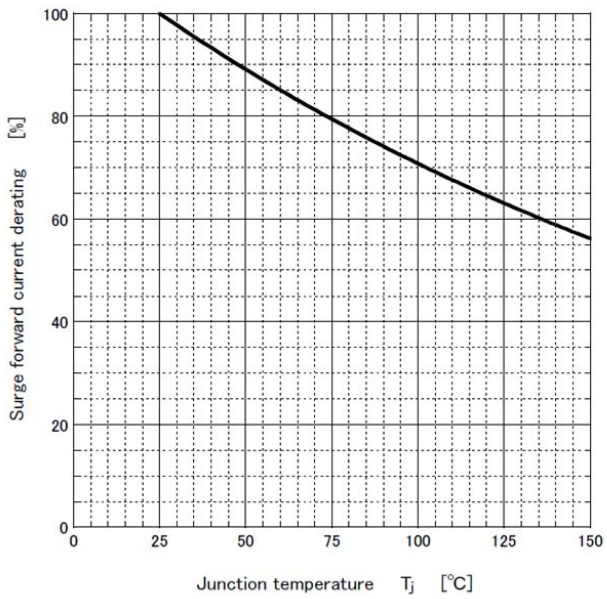
● $V_R = 30V$
R-load
With heatsink



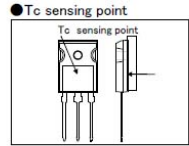
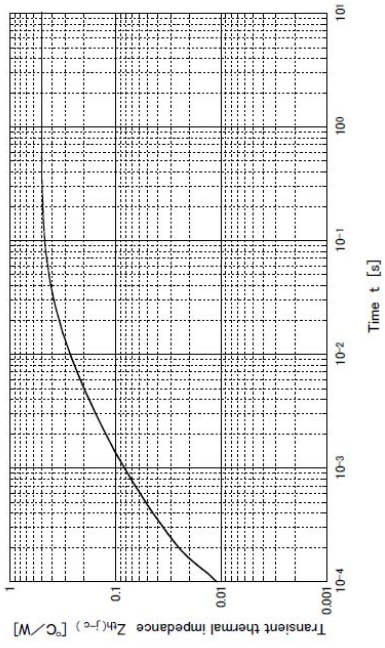
Surge forward current capability



Surge forward current derating vs Junction temperature

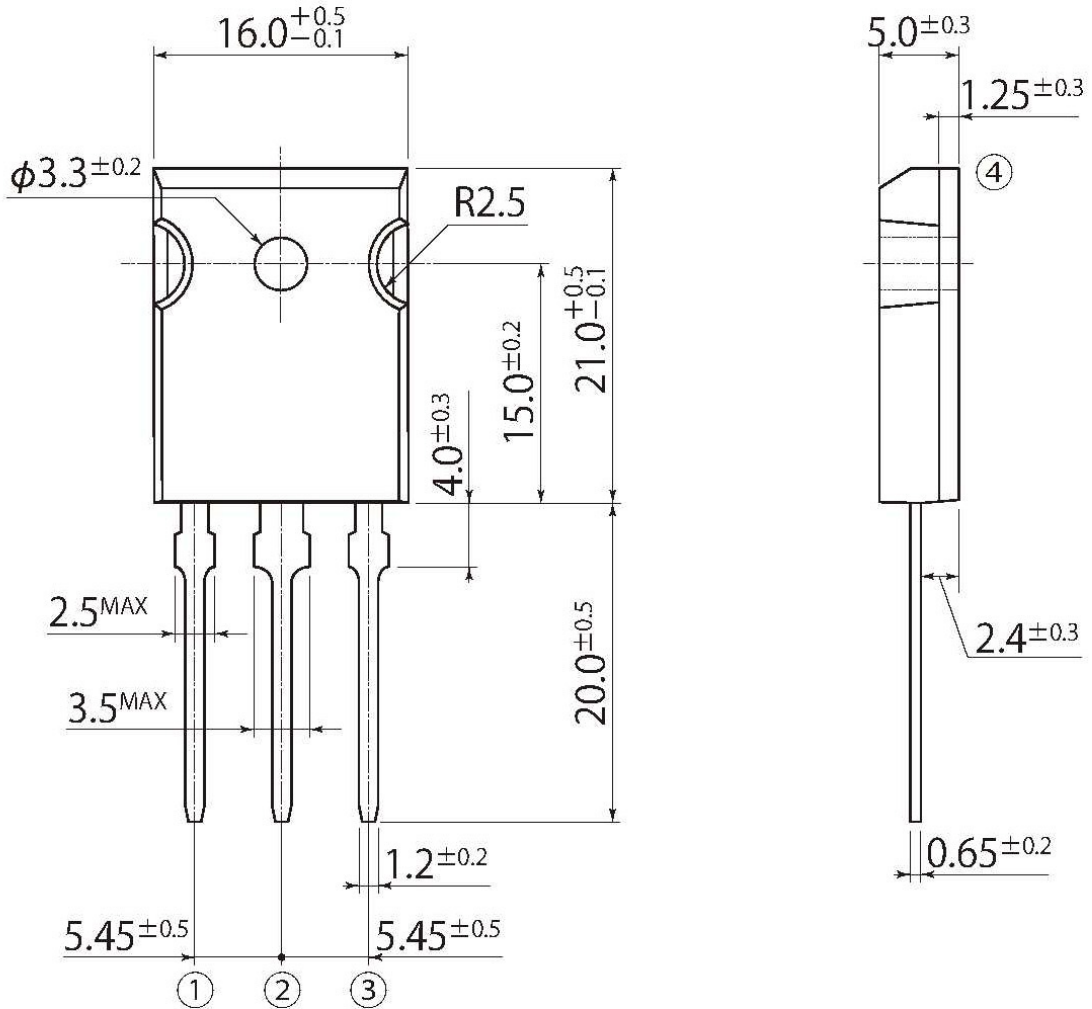


Transient thermal impedance



K5

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



Notes

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