

# S60SC6MT

Schottky Barrier Diodes  
60V, 60A

**Feature**

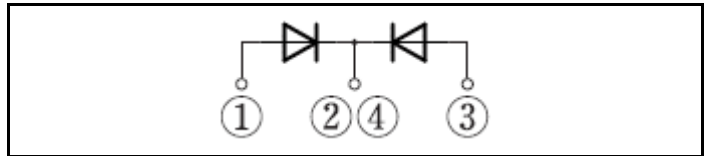
- High Recovery Speed
- Pb free terminal
- RoHS:Yes

**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	Tstg		-55 to 150	°C
Junction temperature	Tj		-55 to 150	°C
Repetitive peak reverse voltage	V <sub>RRM</sub>		60	V
Repetitive peak surge reverse voltage	V <sub>RRSM</sub>	Pulse width 0.5ms, duty=1/40	65	V
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, Rating for each diode I <sub>F(AV)</sub> /2, With heatsink, Tc=121 °C	60	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C	470	A
Mounting torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

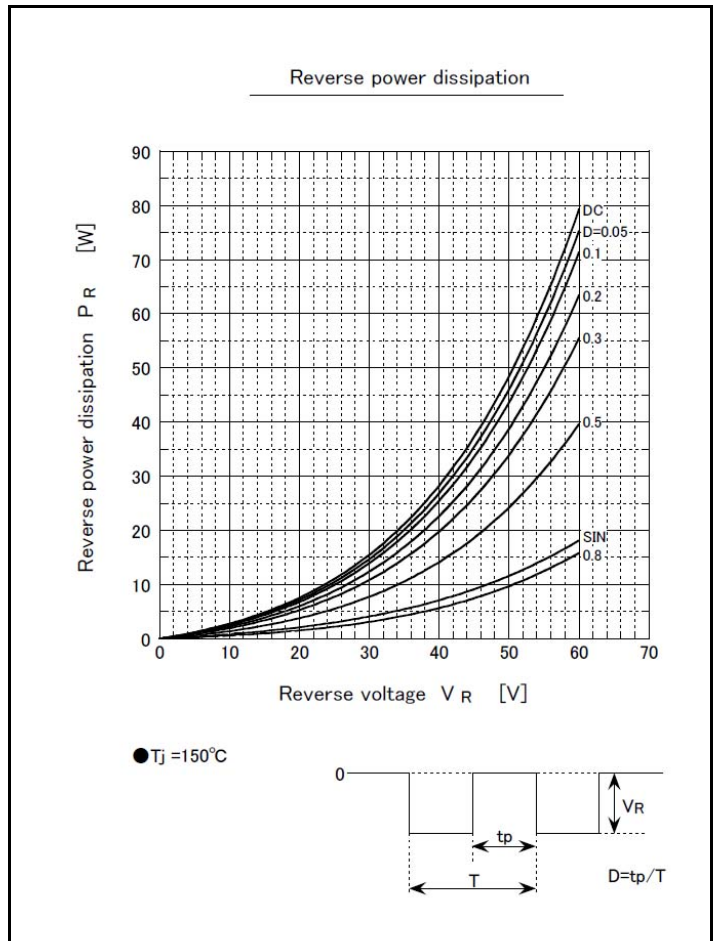
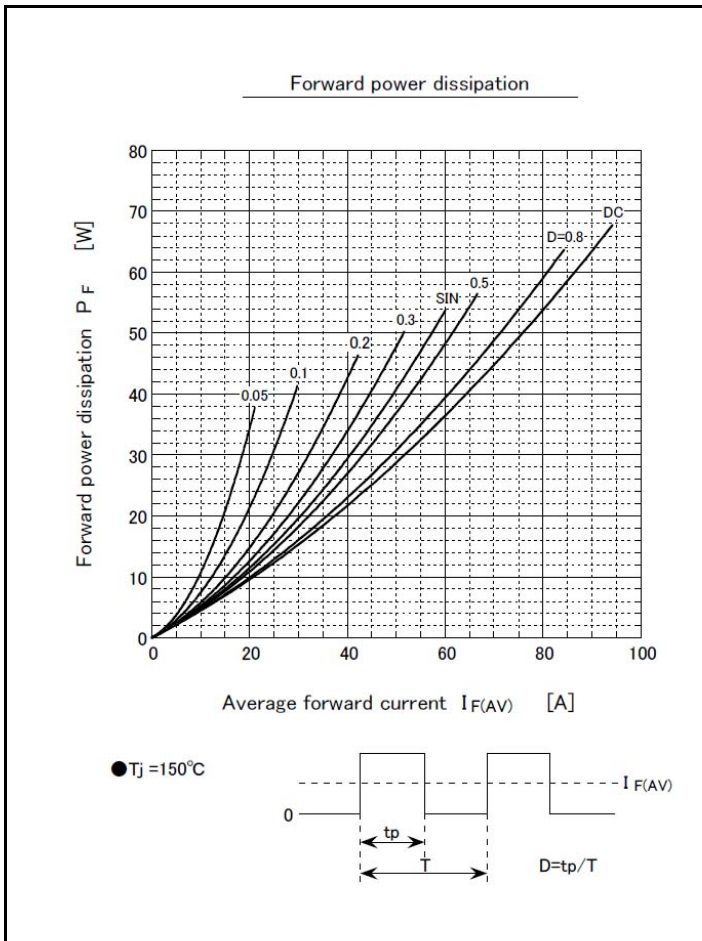
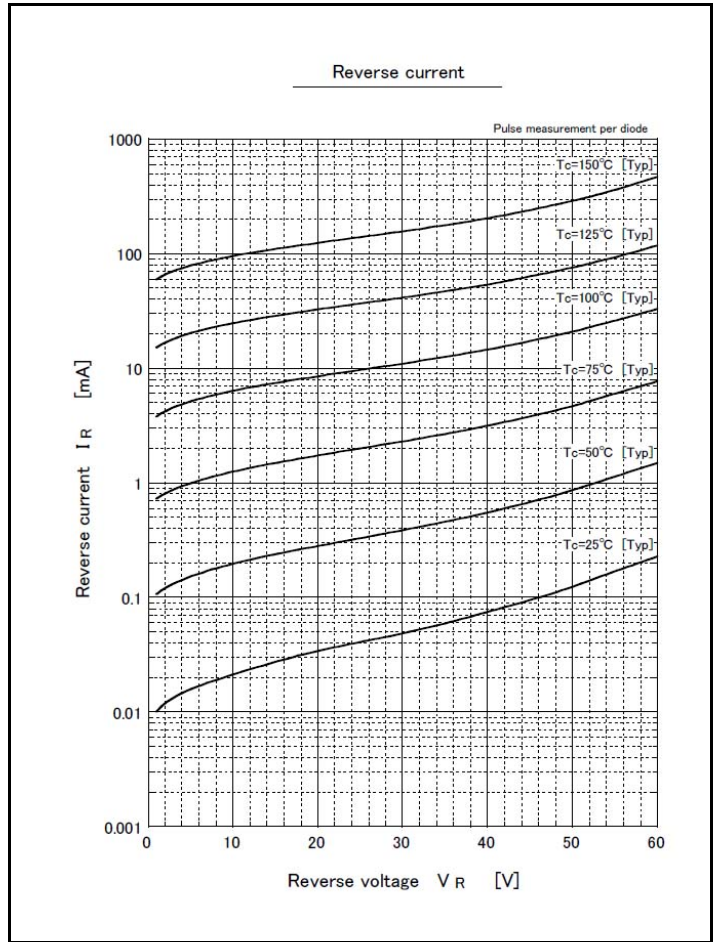
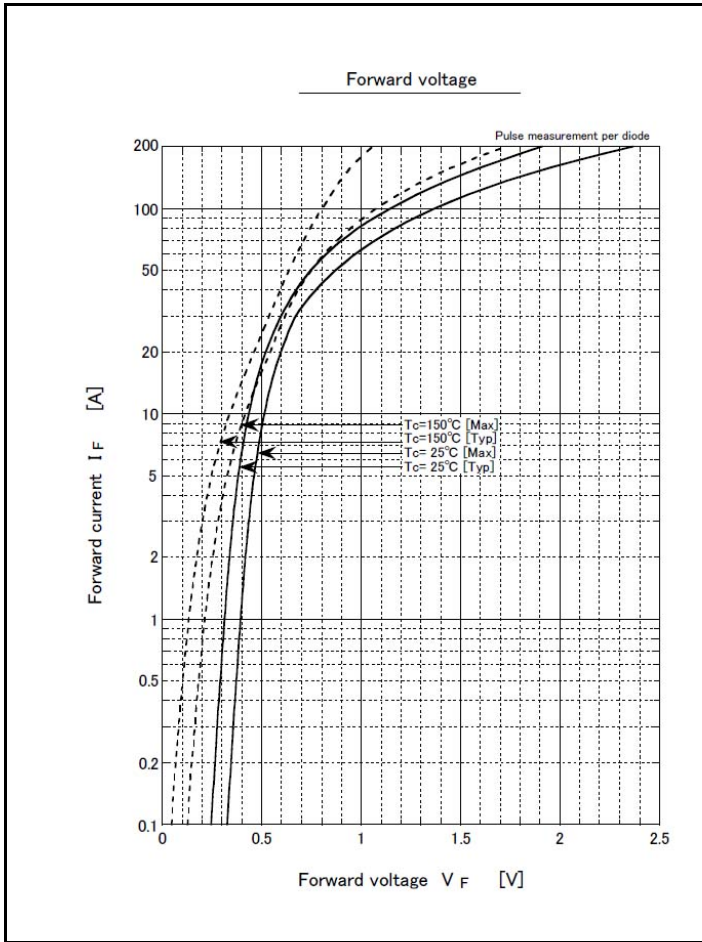
※ :See the original Specifications

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

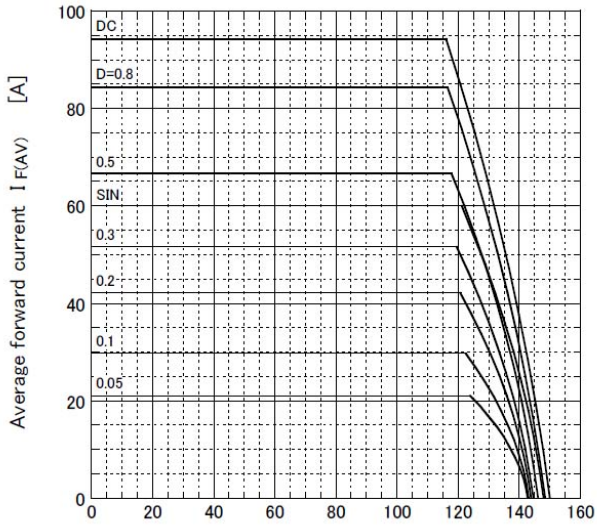
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =30A, Pulse measurement, per diode		0.6	0.67	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =60V, Pulse measurement, per diode			2	mA
Total capacitance	C <sub>t</sub>	f=1MHz, V <sub>R</sub> =10V, per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

\* : See the original Specifications

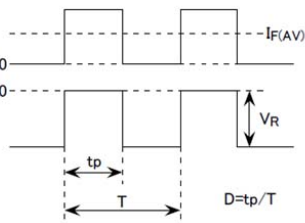
# CHARACTERISTIC DIAGRAMS



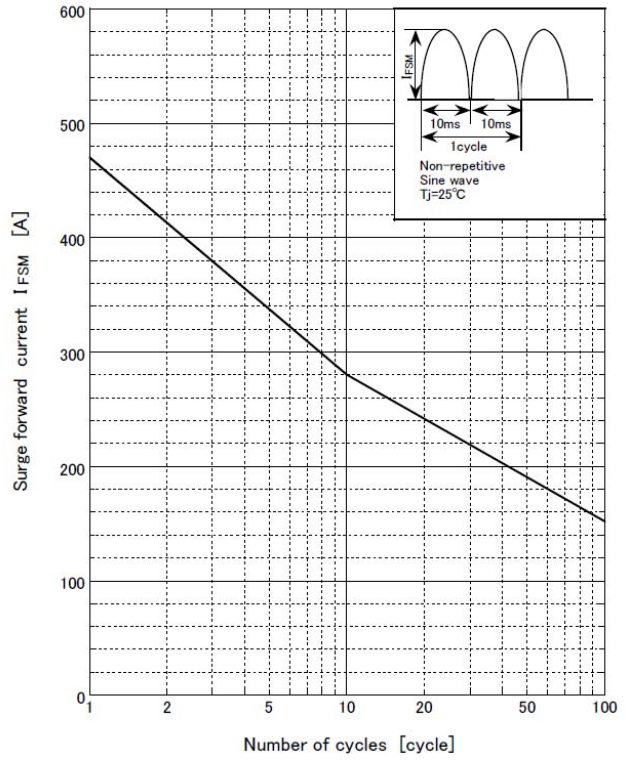
Derating curve



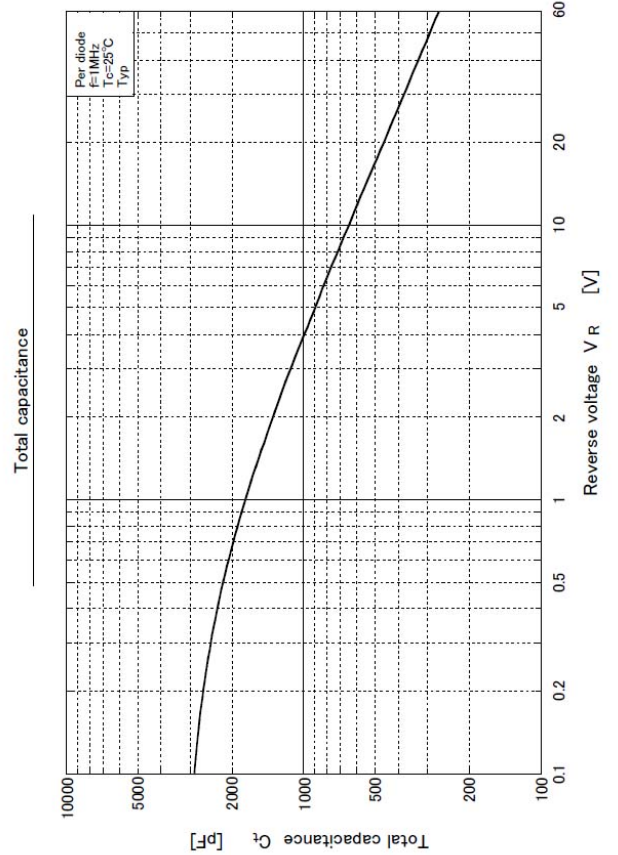
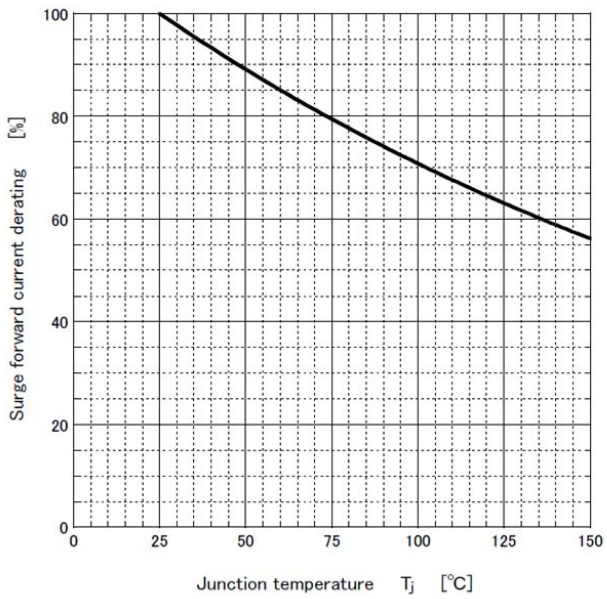
●  $V_R = 30V$   
R-load  
With heatsink



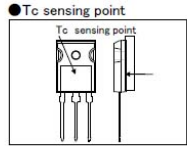
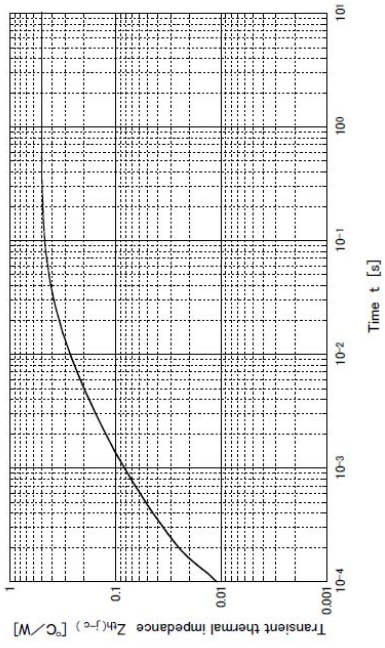
Surge forward current capability



Surge forward current derating vs Junction temperature



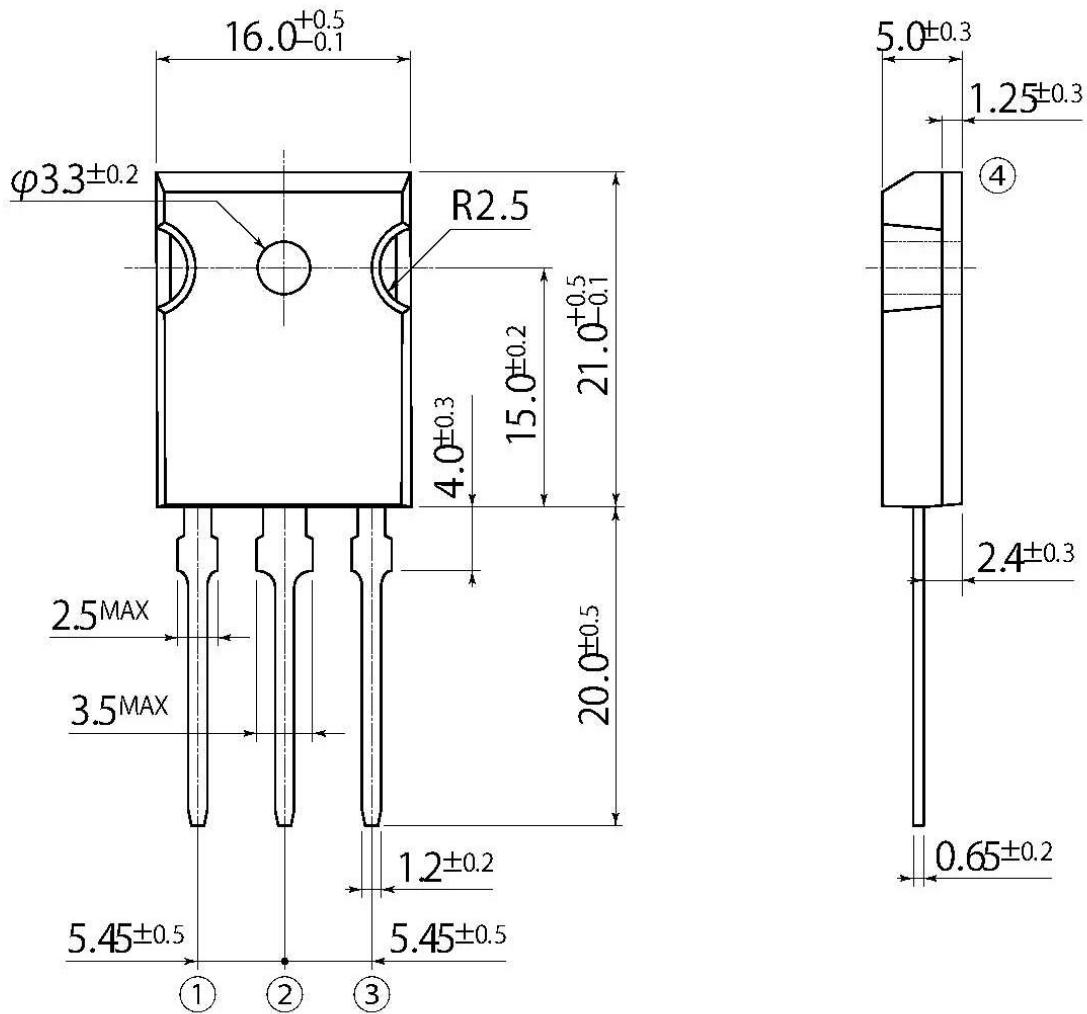
Transient thermal impedance





K5

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



## Notes

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