

# S60SC3LT

## Schottky Barrier Diodes

30V, 60A

### Feature

- High Recovery Speed
- Low  $V_F$
- Pb free terminal
- RoHS:Yes

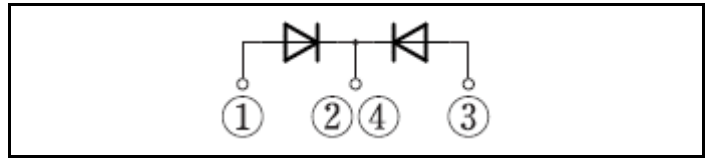
### OUTLINE

Package (House Name): MTO-3PT

Package (JEDEC Code): TO-247AD



### Equivalent circuit



### Absolute Maximum Ratings (unless otherwise specified : $T_c=25^\circ\text{C}$ )

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	$T_{stg}$		-55 to 150	$^\circ\text{C}$
Junction temperature	$T_j$		150	$^\circ\text{C}$
Repetitive peak reverse voltage	$V_{RRM}$		30	V
Repetitive peak surge reverse voltage	$V_{RRSM}$	Pulse width 0.5ms, duty=1/40	35	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, Rating for each diode $I_F(AV)/2$ , $T_c=138^\circ\text{C}$	60	A
Surge forward current	$I_{FSM}$	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, $T_j=25^\circ\text{C}$	650	A
Surge forward current	$I_{FSM1}$	$t_p=1\text{ms}$ , Sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ\text{C}$	1300	A
Repetitive peak surge reverse power	$P_{RRSM}$	Pulse width 10 $\mu\text{s}$ , $T_j=25^\circ\text{C}$ , per diode	1000	W
Mounting torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

※ :See the original Specifications

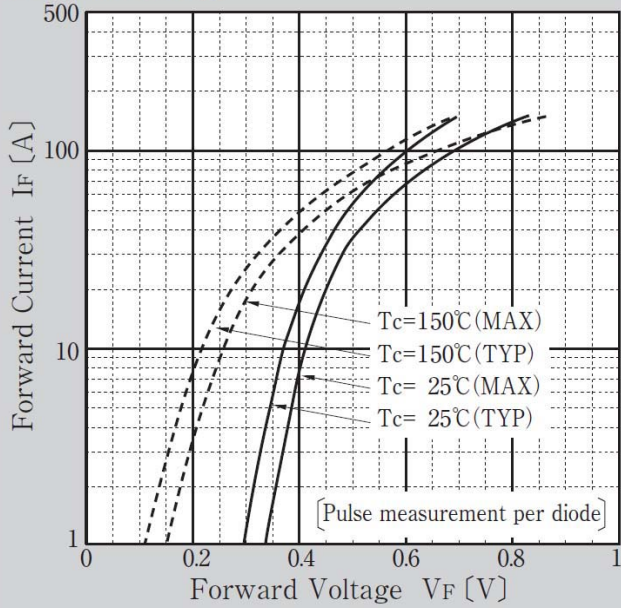
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =30A, Pulse measurement, per diode		0.44	0.48	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =30V, Pulse measurement, per diode			25	mA
Total capacitance	C <sub>t</sub>	f=1MHz, V <sub>R</sub> =10V, per diode		1600		pF
Thermal resistance	R <sub>th(j-c)</sub>	Junction to case			0.3	°C/W

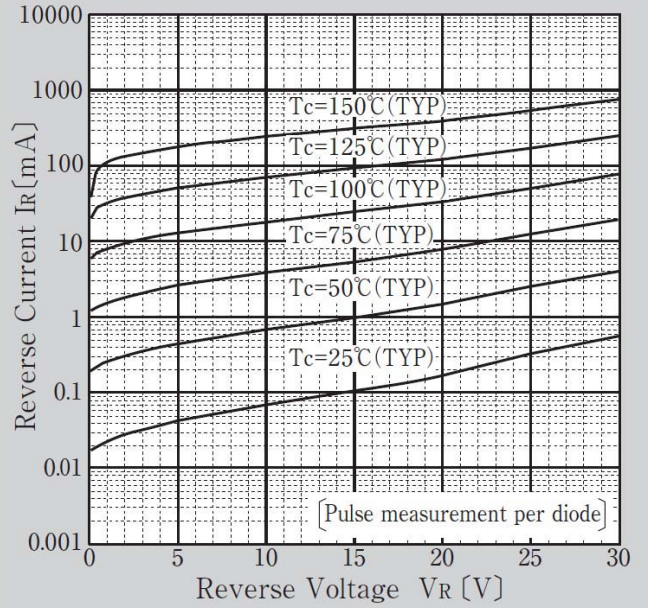
\* : See the original Specifications

# CHARACTERISTIC DIAGRAMS

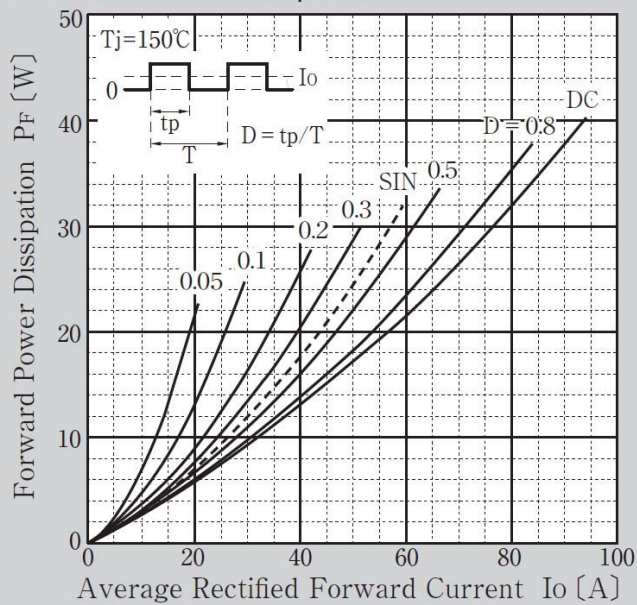
### Forward Voltage



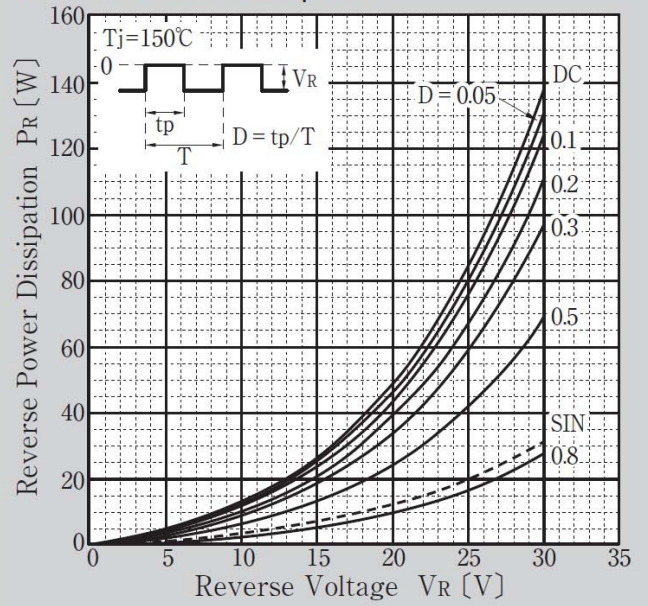
### Reverse Current

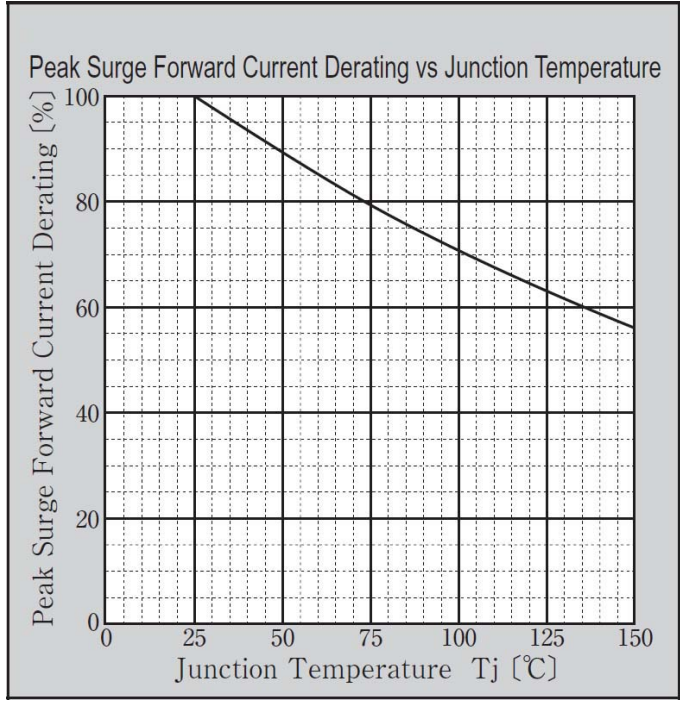
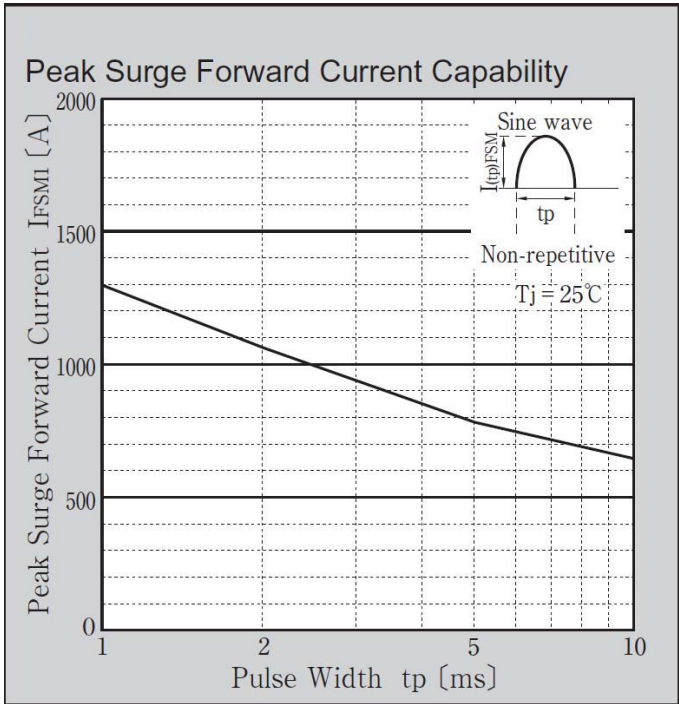
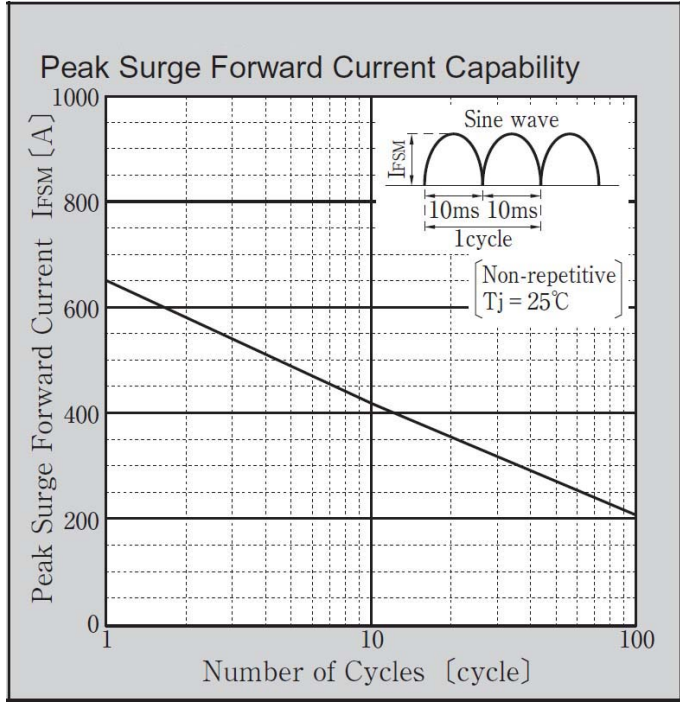
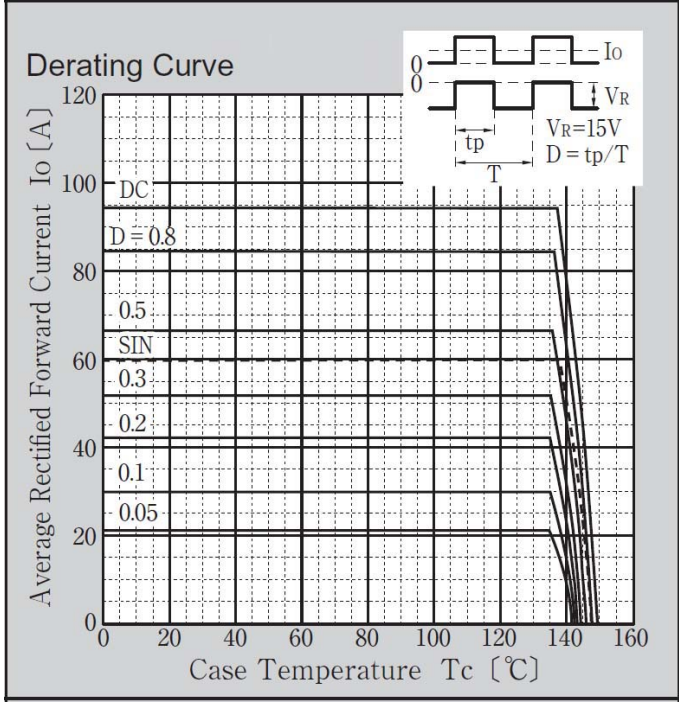


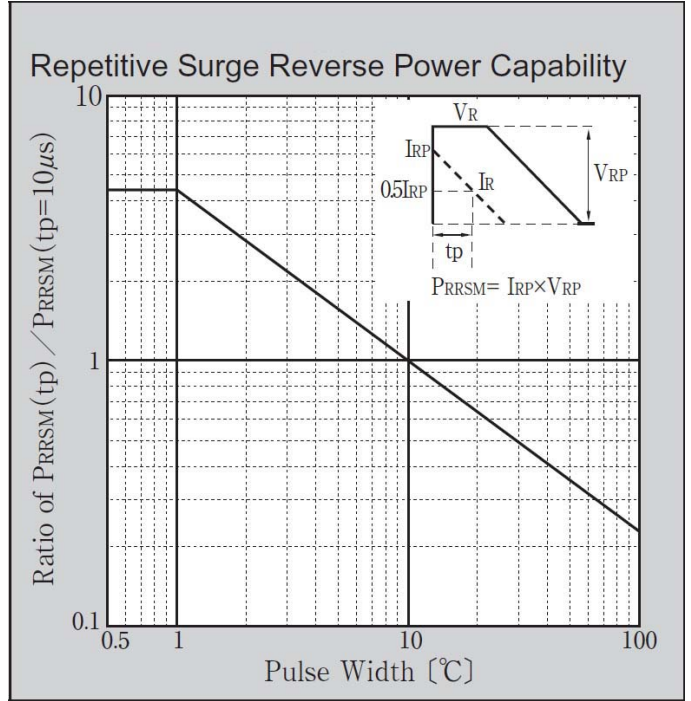
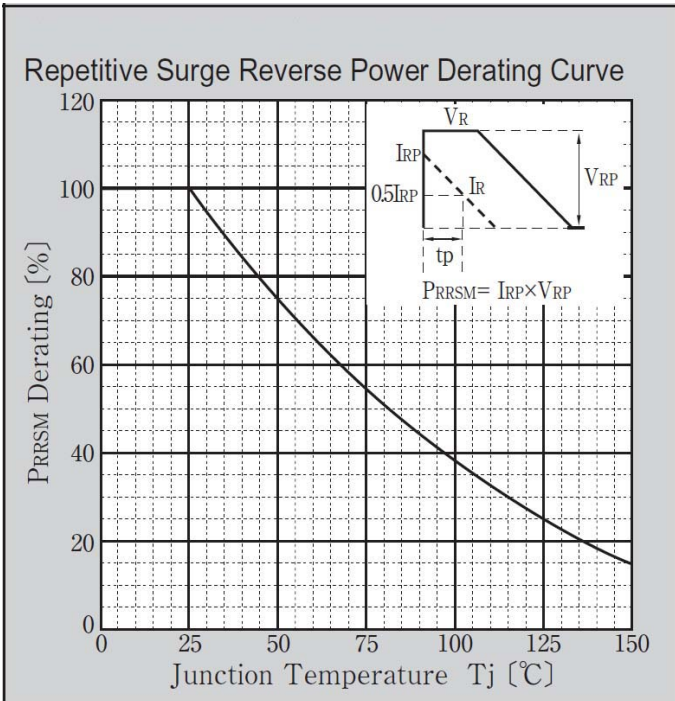
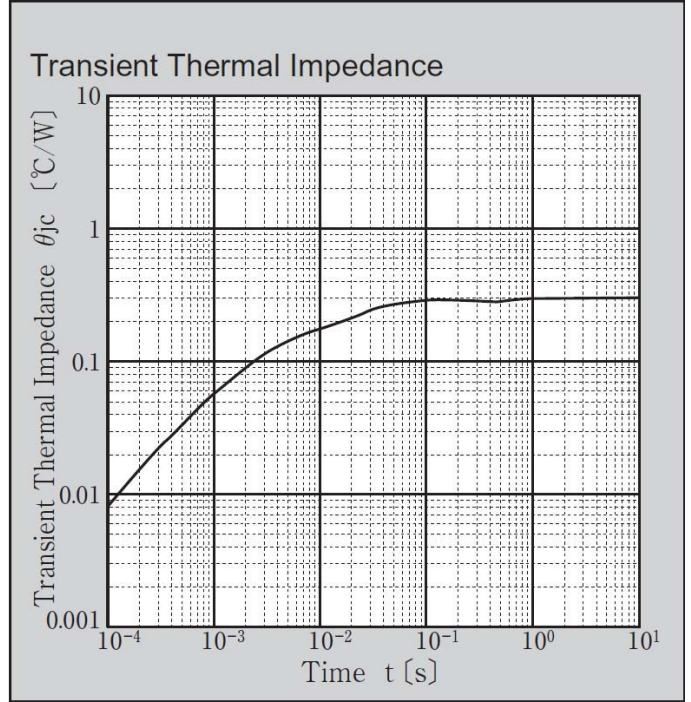
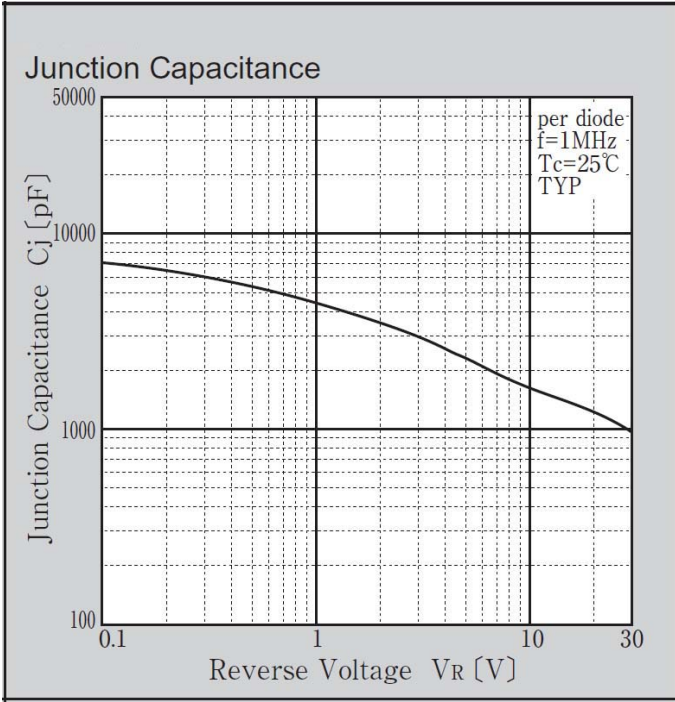
### Forward Power Dissipation



### Reverse Power Dissipation

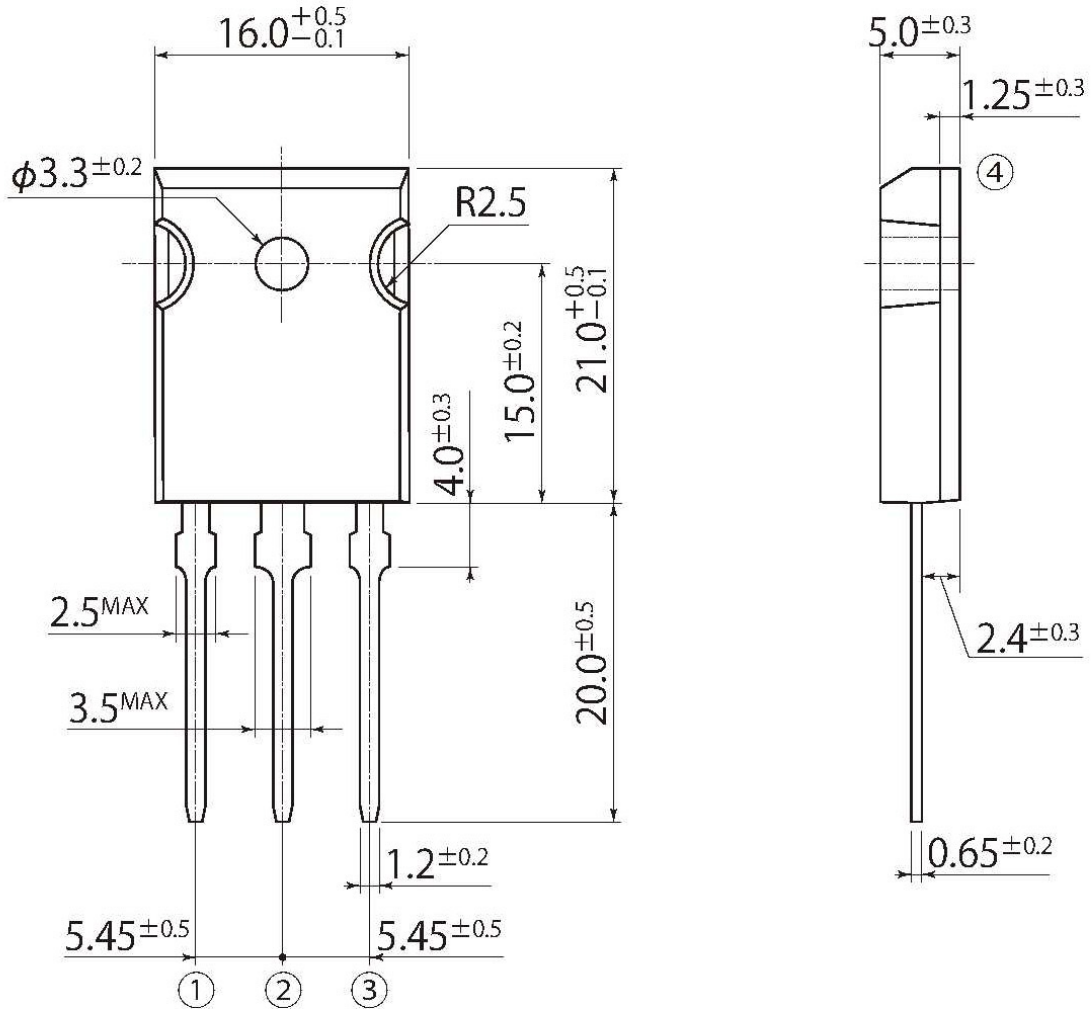






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JEDEC Code	TO-247AD
JEITA Code	—
House Name	MTO-3PT(3pin)



## Notes

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