

S30SC4MT

Schottky Barrier Diodes
40V, 30A

Feature

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

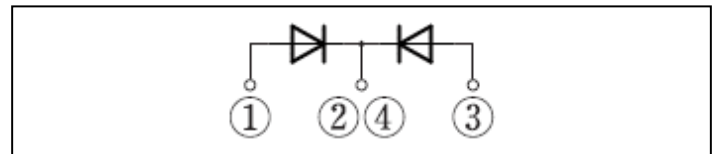
OUTLINE

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}		40	V
Repetitive peak surge reverse voltage	V_{RRSM}	Pulse width 0.5ms, duty=1/40	45	V
Average forward current	$I_{F(AV)}$	50Hz sine wave, Resistance load, Rating for each diode $I_{F(AV)}/2$, $T_c=132^\circ\text{C}$	30	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive, 1cycle, Peak value, $T_j=25^\circ\text{C}$	300	A
Mounting torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

※ :See the original Specifications

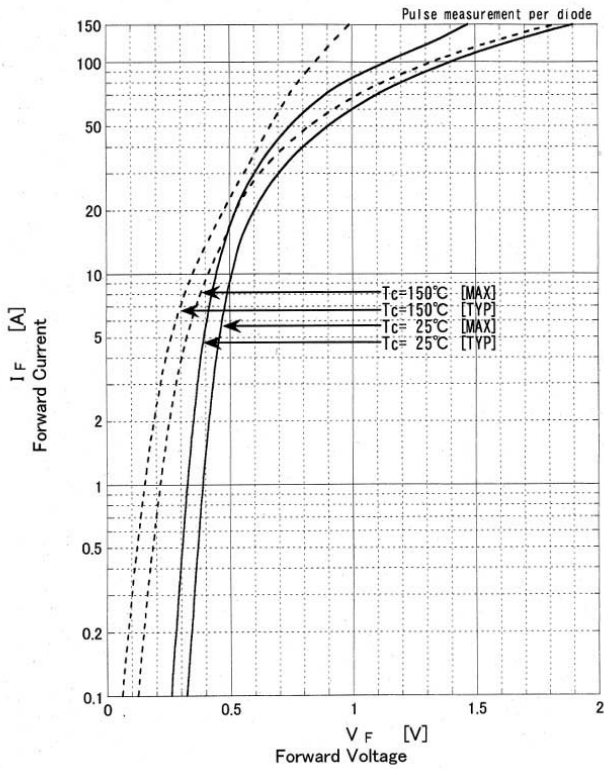
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	IF=15A, Pulse measurement, per diode		0.49	0.55	V
Reverse current	I _R	VR=40V, Pulse measurement, per diode			1.5	mA
Total capacitance	Ct	f=1MHz, VR=10V, per diode		410		pF
Thermal resistance	Rth(j-c)	Junction to case			0.8	°C/W

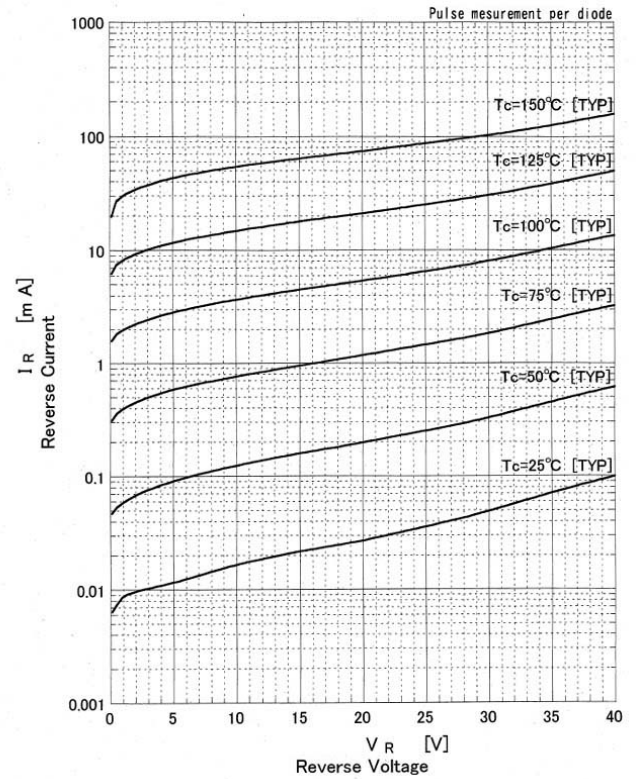
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

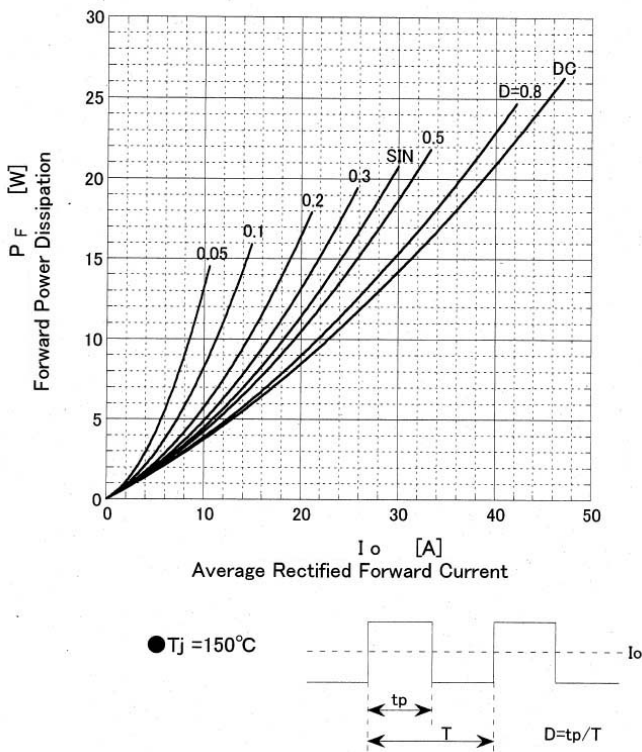
S30SC4MT Forward Voltage



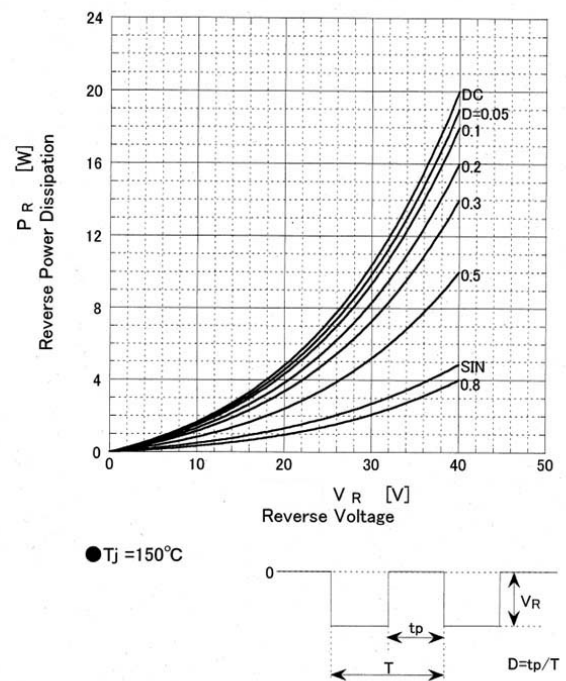
S30SC4MT Reverse Current



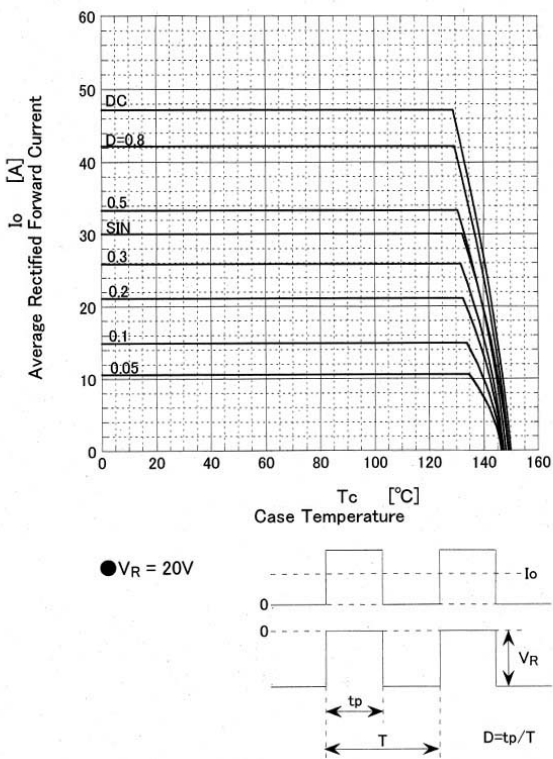
S30SC4MT Forward Power Dissipation



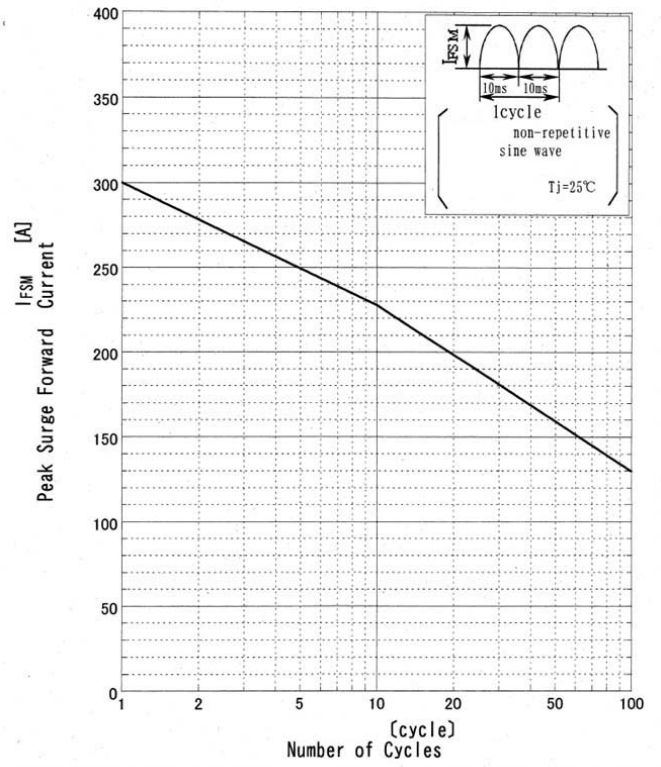
S30SC4MT Reverse Power Dissipation



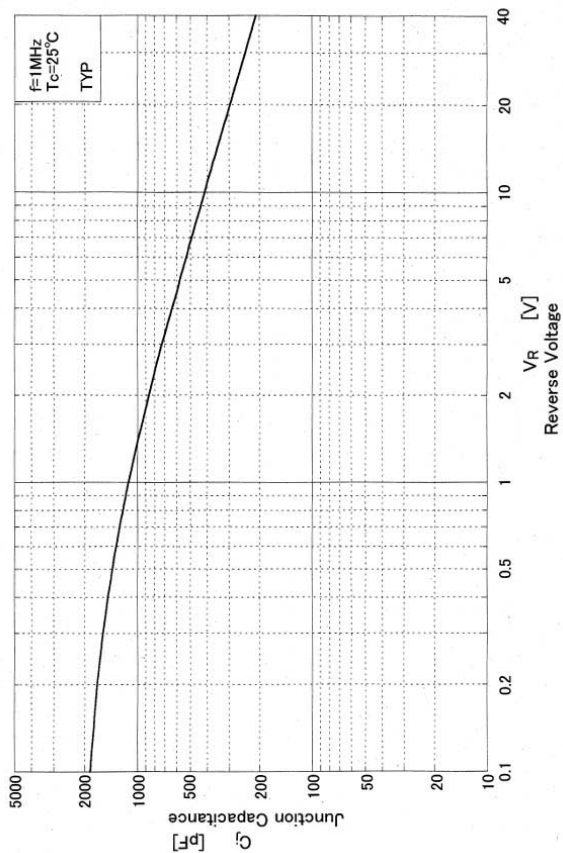
S30SC4MT Derating Curve



S30SC4MT Peak Surge Forward Capability

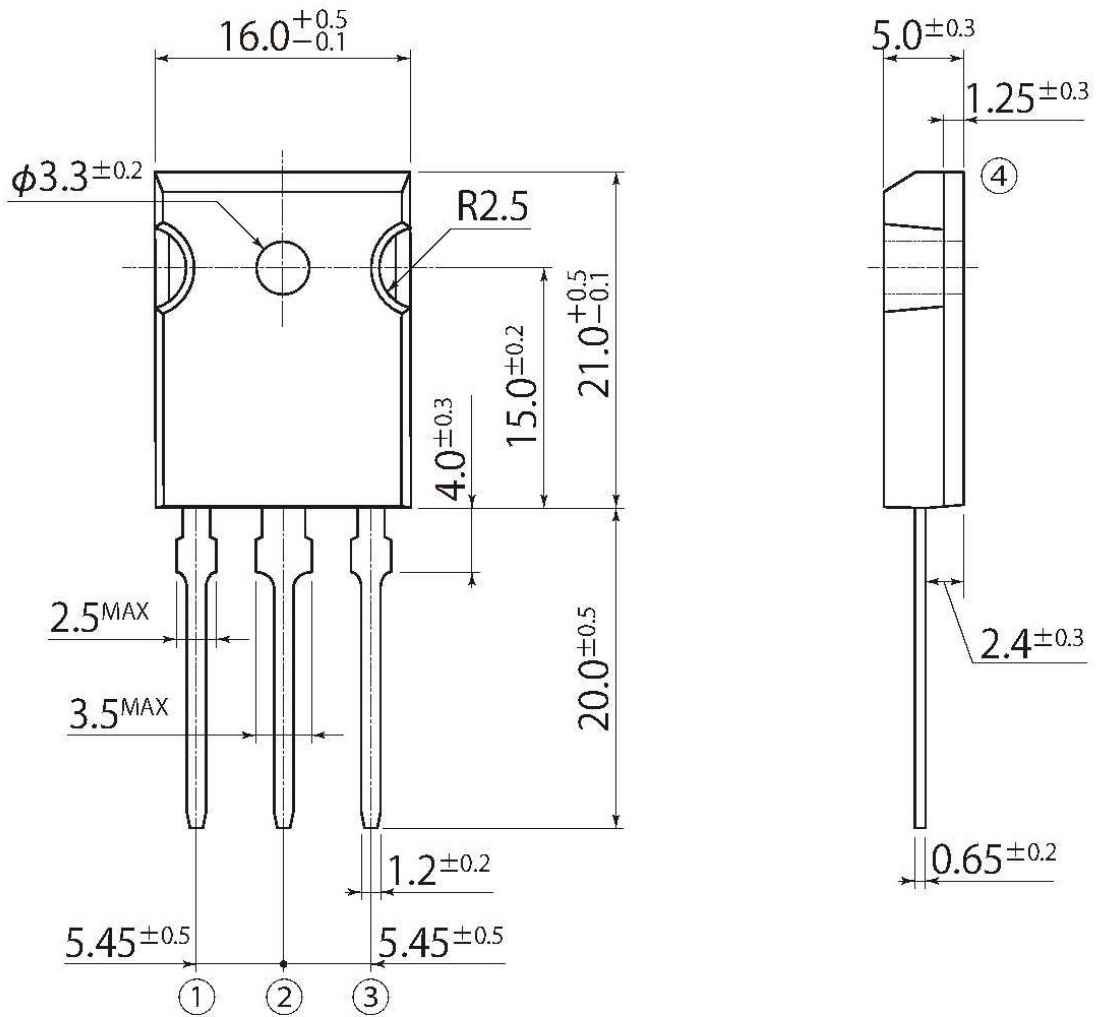


S30SC4MT Junction Capacitance



K5

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



Notes

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