

S30SC4MT

Schottky Barrier Diodes

40V, 30A

Feature

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

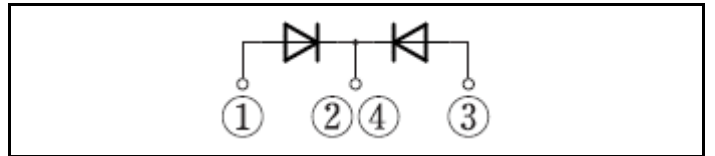
OUTLINE

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, 1 cycle, Peak value, $T_j=25^\circ\text{C}$	300	A
Mounting torque	TOR	(Recommended torque : $0.5\text{N}\cdot\text{m}$)	0.8	$\text{N}\cdot\text{m}$

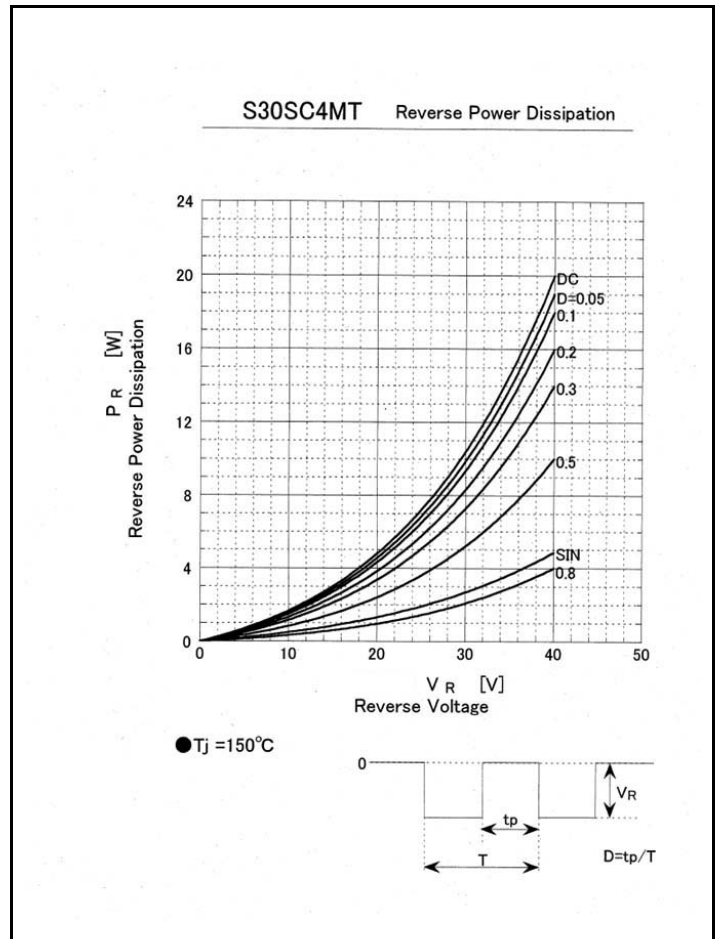
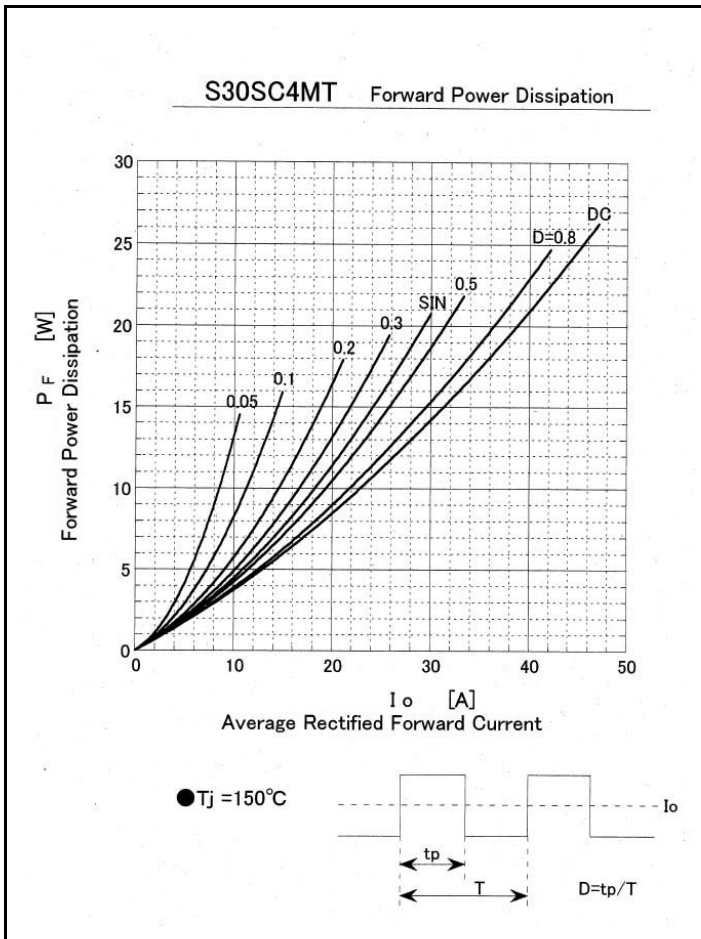
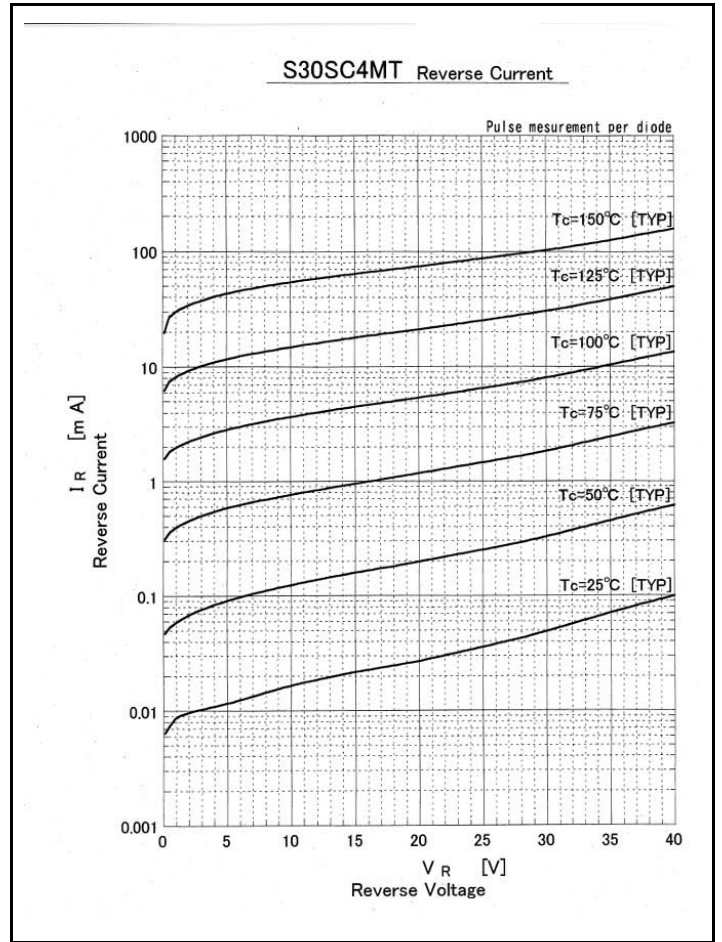
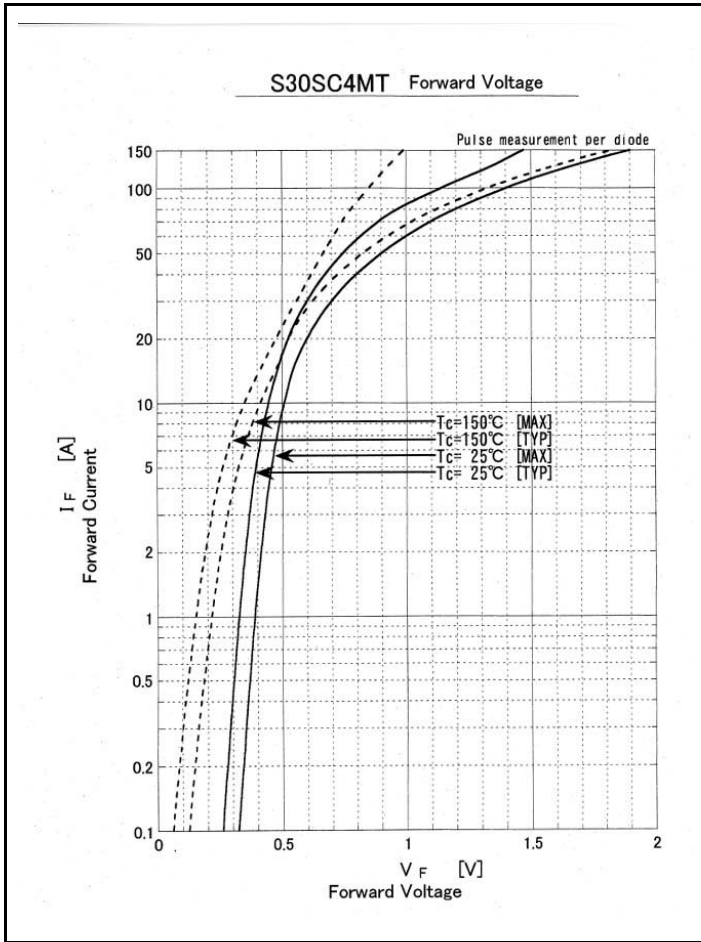
※ :See the original Specifications

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

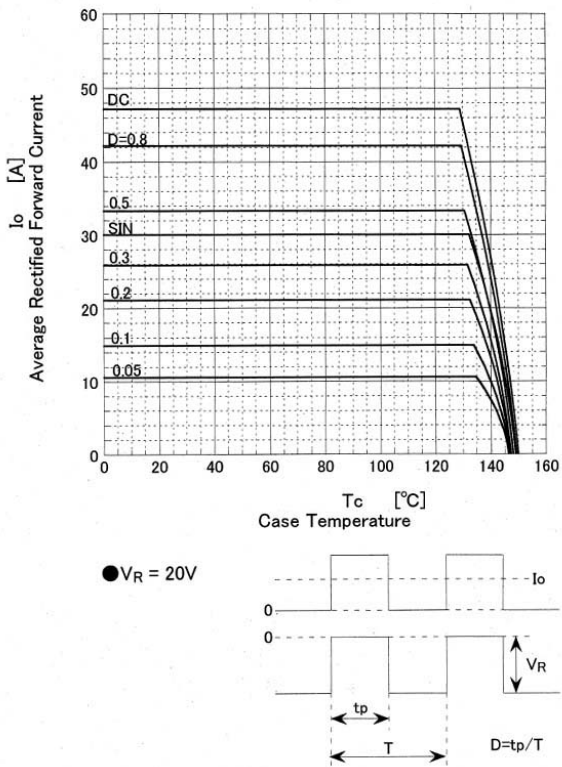
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	I _F =15A, Pulse measurement, per diode		0.49	0.55	V
Reverse current	I _R	V _R =40V, Pulse measurement, per diode			1.5	mA
Total capacitance	C _t	f=1MHz, V _R =10V, per diode		410		pF
Thermal resistance	R _{th(j-c)}	Junction to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

* : See the original Specifications

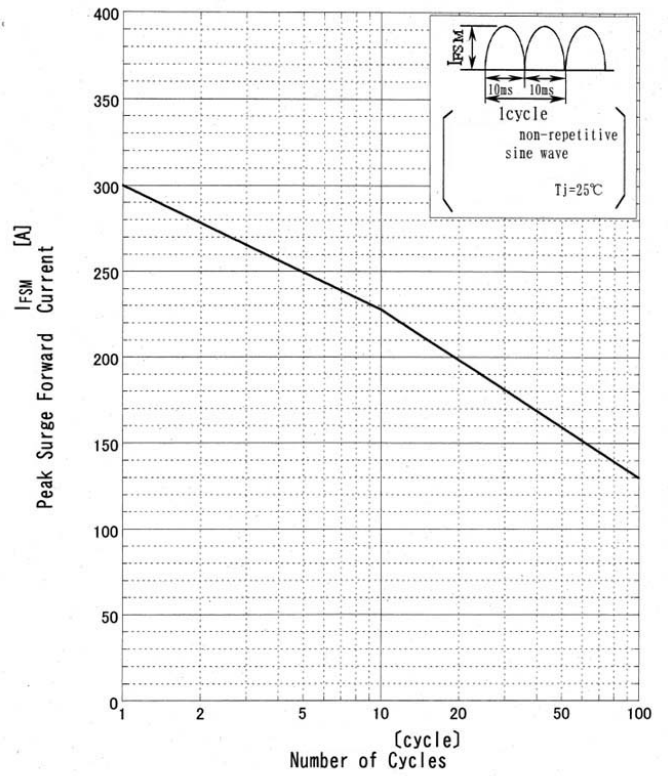
CHARACTERISTIC DIAGRAMS



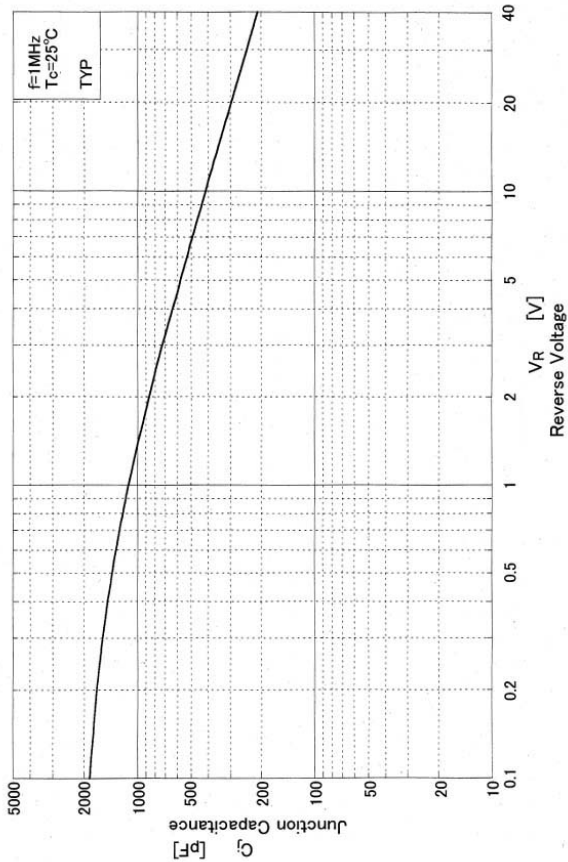
S30SC4MT Derating Curve



S30SC4MT Peak Surge Forward Capability



S30SC4MT Junction Capacitance



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