

S20SC9MT

Schottky Barrier Diodes  
90V, 20A

Feature

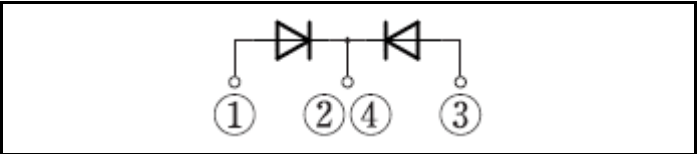
- High Recovery Speed
- Pb free terminal
- RoHS:Yes

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 temperrature	Tstg		-55 to 150	°C
Junction temperature	Tj		150	°C
Repetitive peak reverse voltage	VRRM		90	V
Repetitive peak surge reverse voltage	VRRSM	Pulse width 0.5ms, duty=1/40	100	V
Average forward current	IF(AV)	50Hz sine wave, Resistance load, Rating for each diode IF(AV)/2, Tc=136°C	20	A
Surge forward current	IFSM	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=150°C	200	A
Mounting torque	TOR	(Recommended torque : 0.5N・m)	0.8	N・m

※ :See the original Specifications

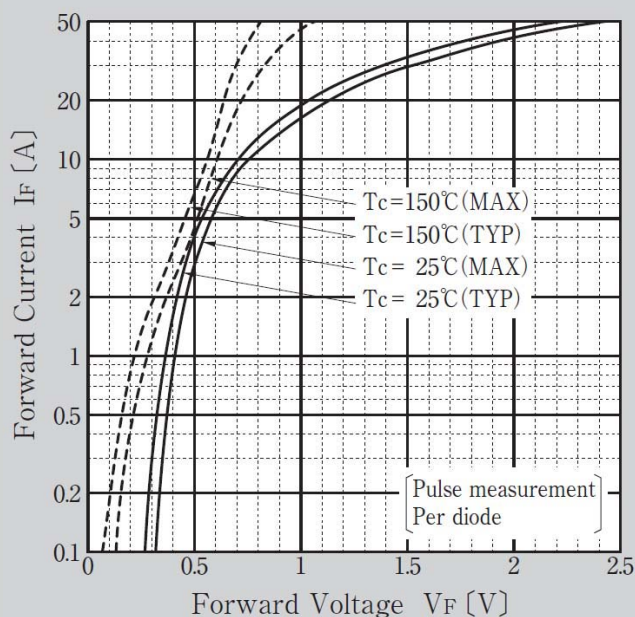
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	$I_F=10A$ , Pulse measurement, per diode		0.7	0.75	V
Reverse current	$I_R$	$V_R=90V$ , Pulse measurement, per diode			1	mA
Total capacitance	$C_t$	$f=1MHz$ , $V_R=10V$ , per diode		245		pF
Thermal resistance	$R_{th(j-c)}$	Junction to case			0.8	°C/W

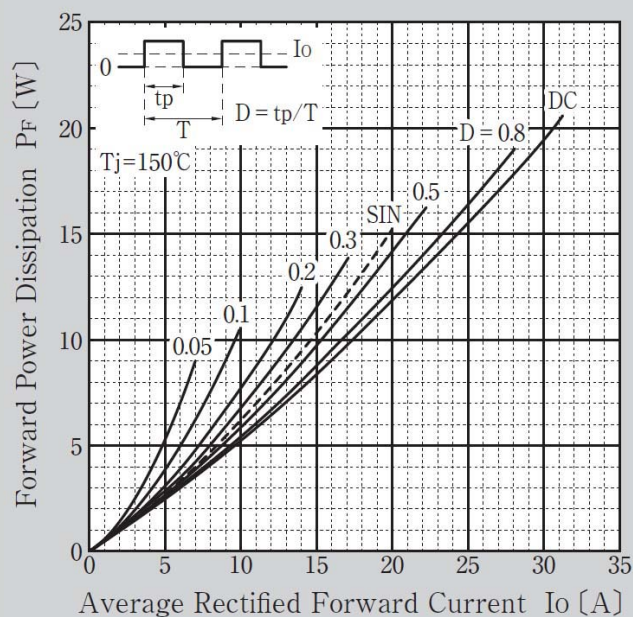
※ : See the original Specifications

## CHARACTERISTIC DIAGRAMS

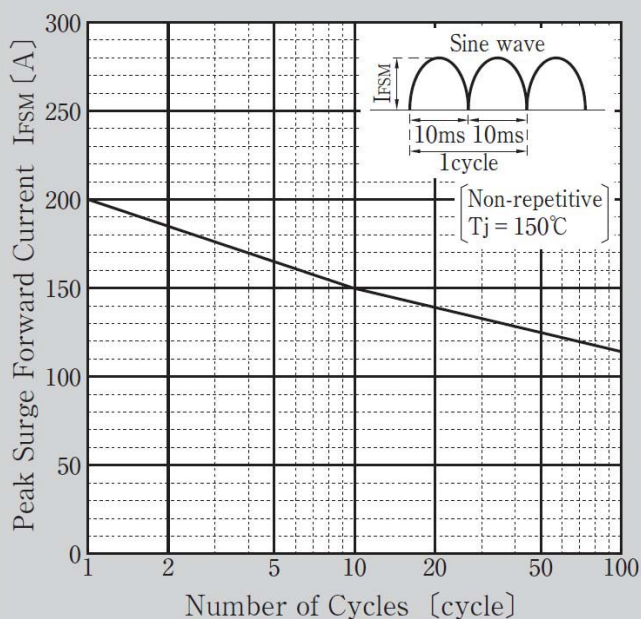
### Forward Voltage



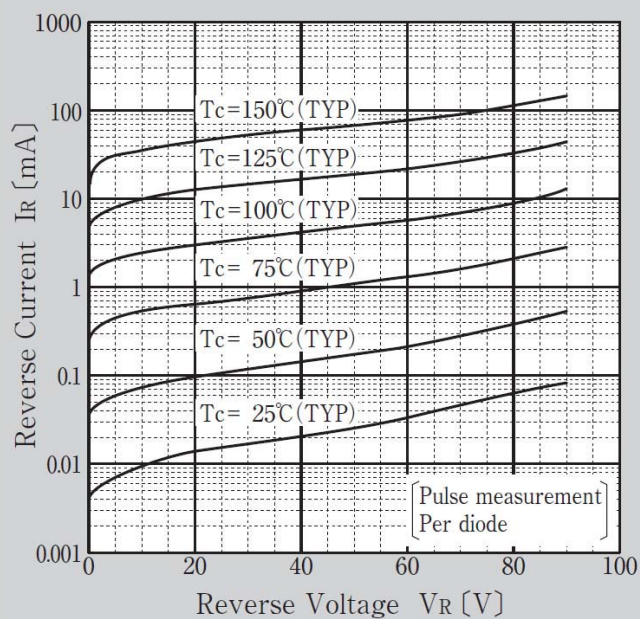
### Forward Power Dissipation



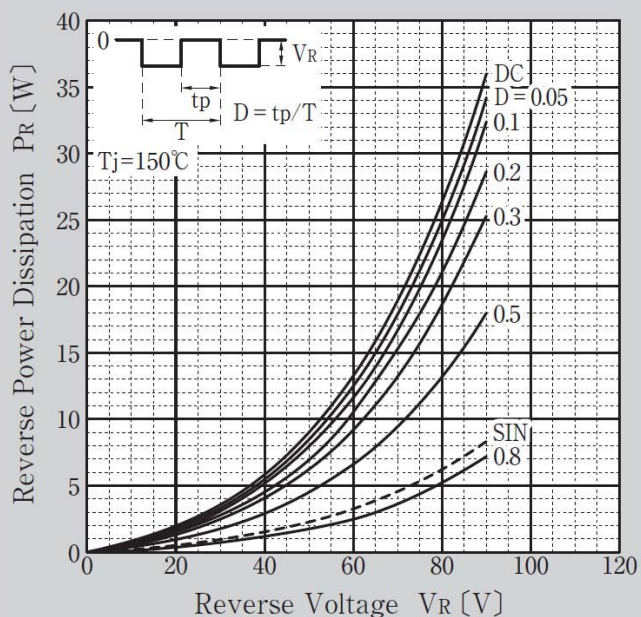
### Peak Surge Forward Current Capability



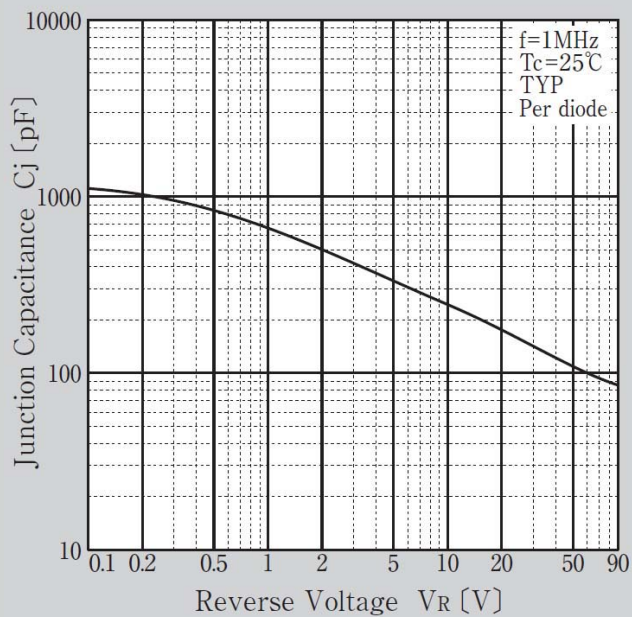
### Reverse Current



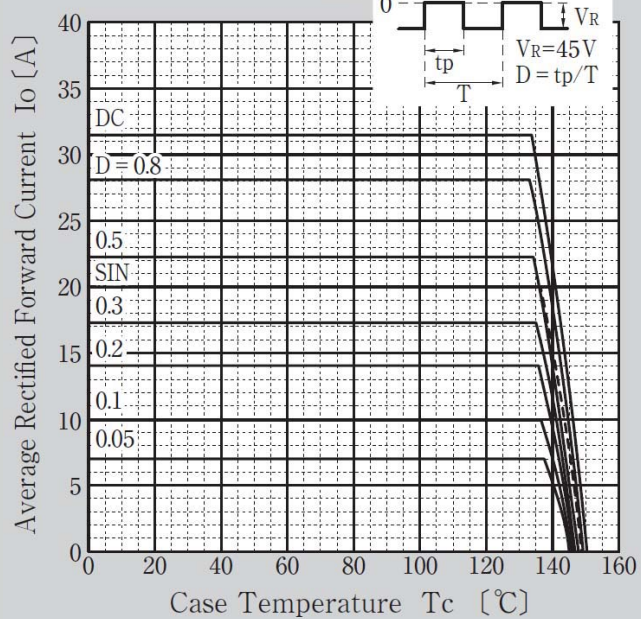
### Reverse Power Dissipation



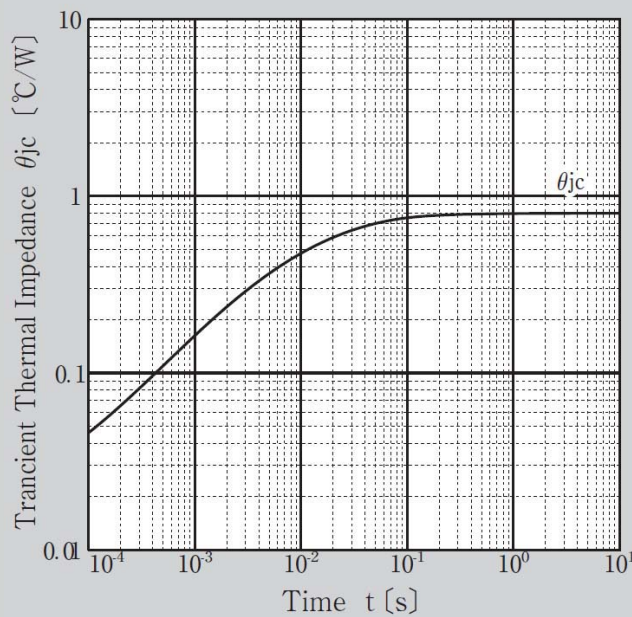
### Junction Capacitance



### Derating Curve



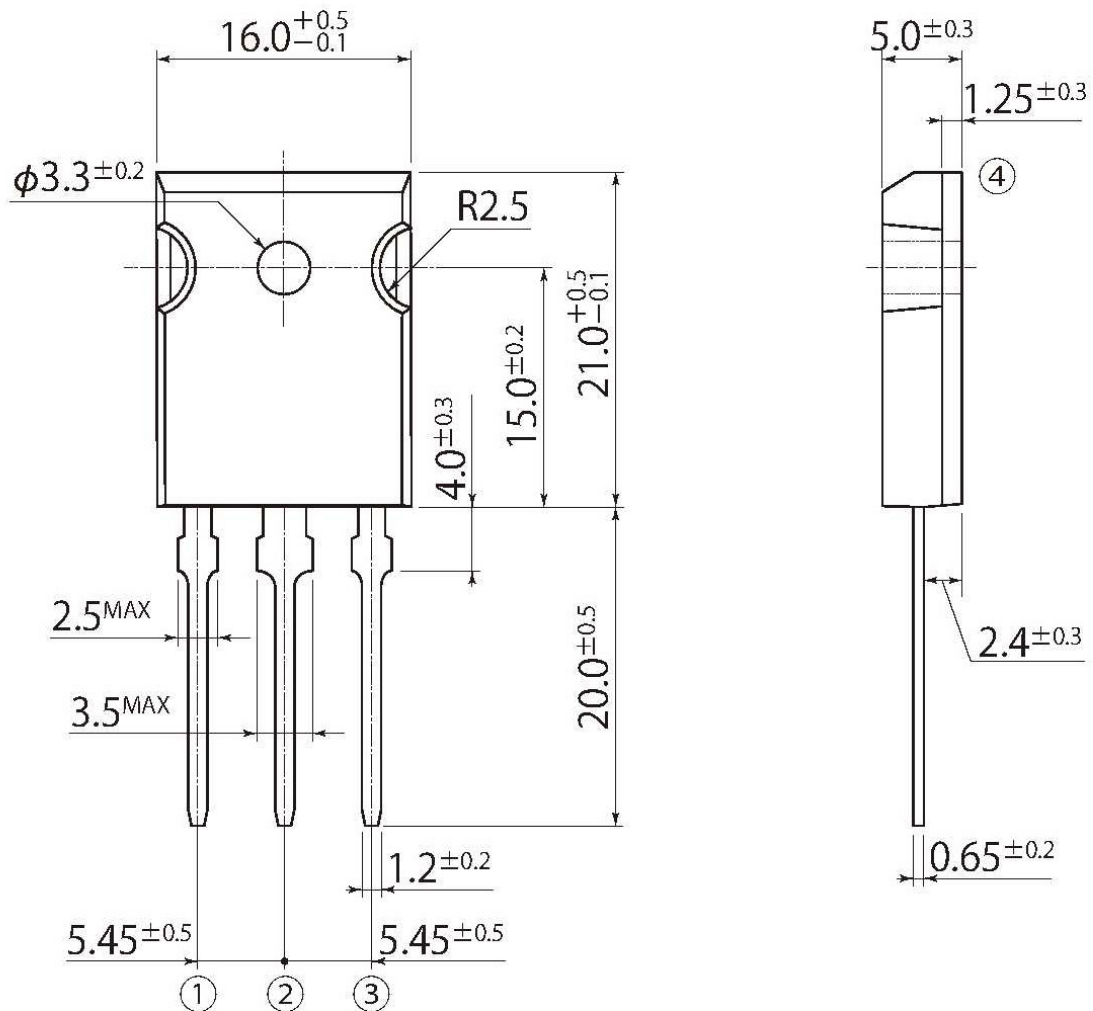
### Transient Thermal Impedance





K5

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



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