ShinDengen

S20SC9MT

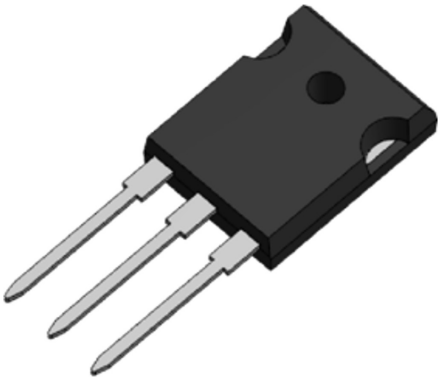
Schottky Barrier Diodes
90V, 20A

Feature

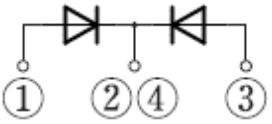
- High Recovery Speed
- Pb free terminal
- RoHS:Yes

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	V_{RRM}		90	V
Repetitive peak surge reverse voltage	V_{RRSM}	Pulse width 0.5ms, duty=1/40	100	V
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, Rating for each diode IF(AV)/2, Tc=136°C	20	A
Surge forward current	I_{FSM}	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

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

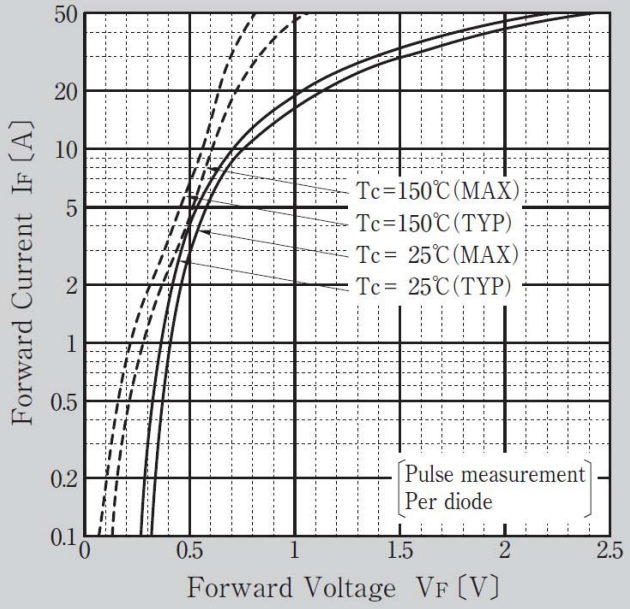
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=10A, Pulse measurement, per diode		0.7	0.75	V
Reverse current	I_R	VR=90V, Pulse measurement, per diode			1	mA
Total capacitance	Ct	f=1MHz, VR=10V, per diode		245		pF
Thermal resistance	Rth(j-c)	Junction to case			0.8	°C/W

※ ：See the original Specifications

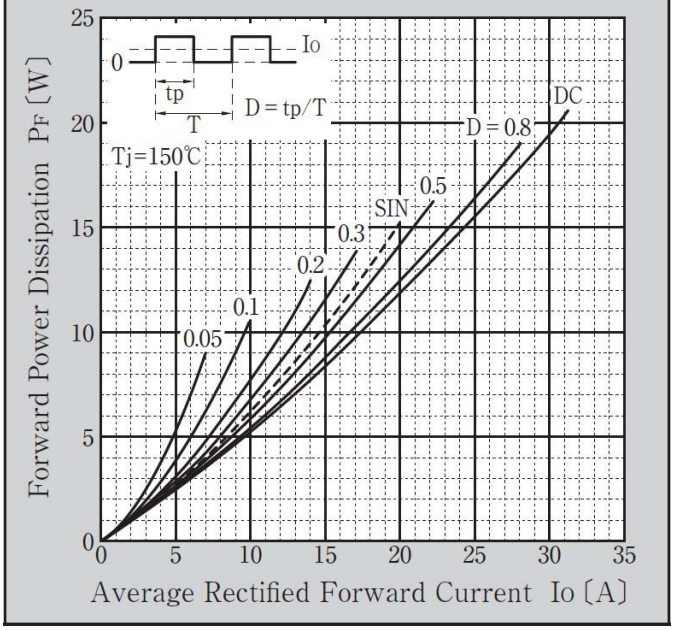
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CHARACTERISTIC DIAGRAMS

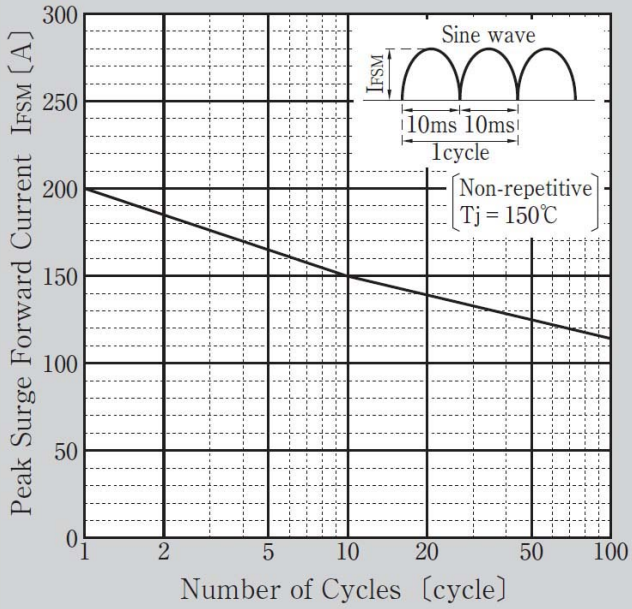
Forward Voltage



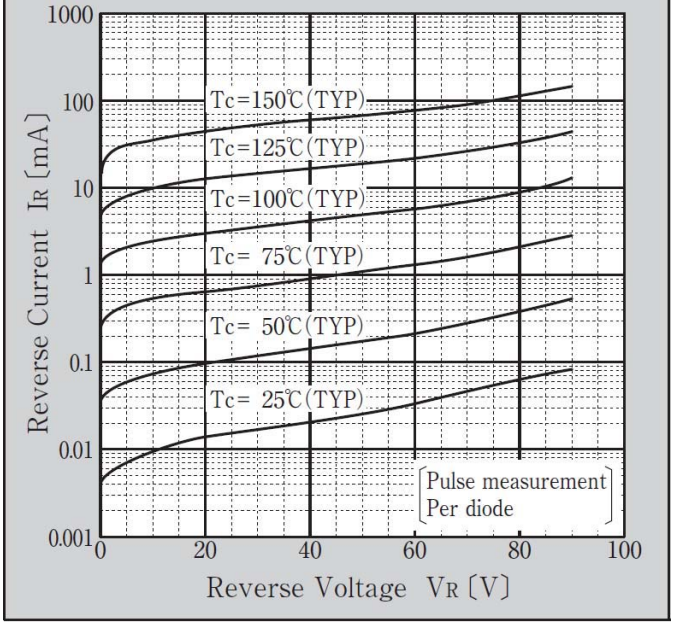
Forward Power Dissipation



Peak Surge Forward Current Capability

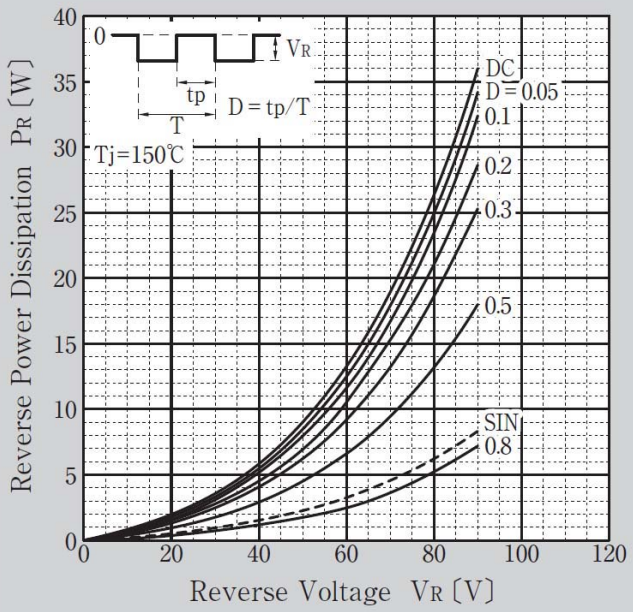


Reverse Current

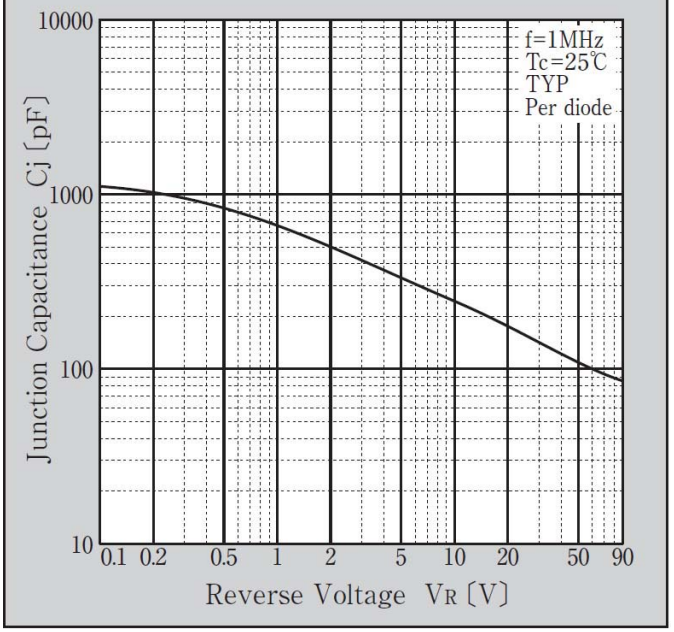


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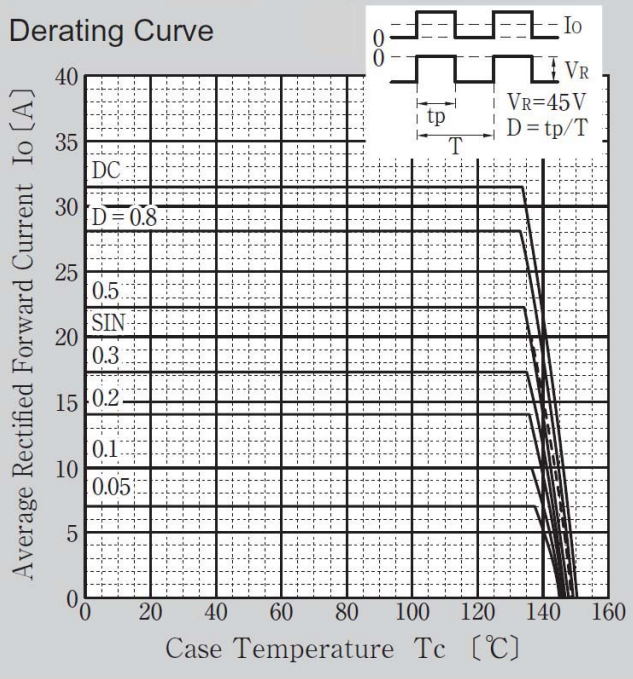
Reverse Power Dissipation



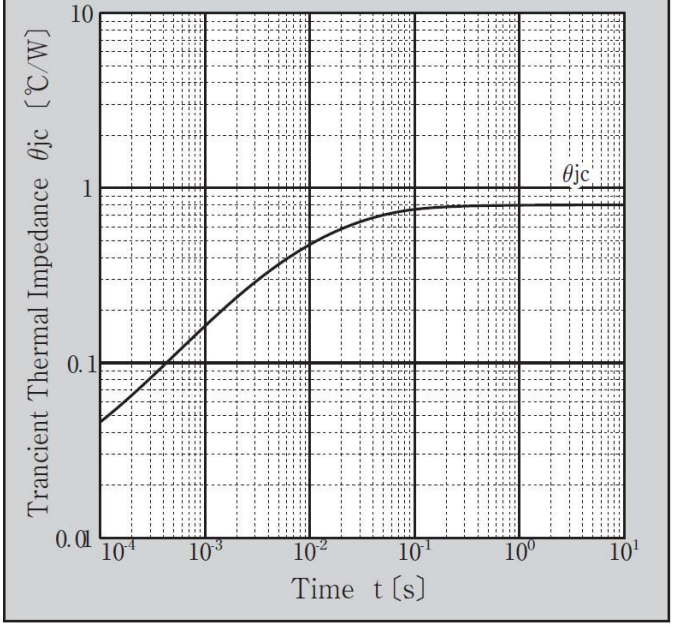
Junction Capacitance



Derating Curve



Transient Thermal Impedance



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Outline Dimensions

unit:mm

K5

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

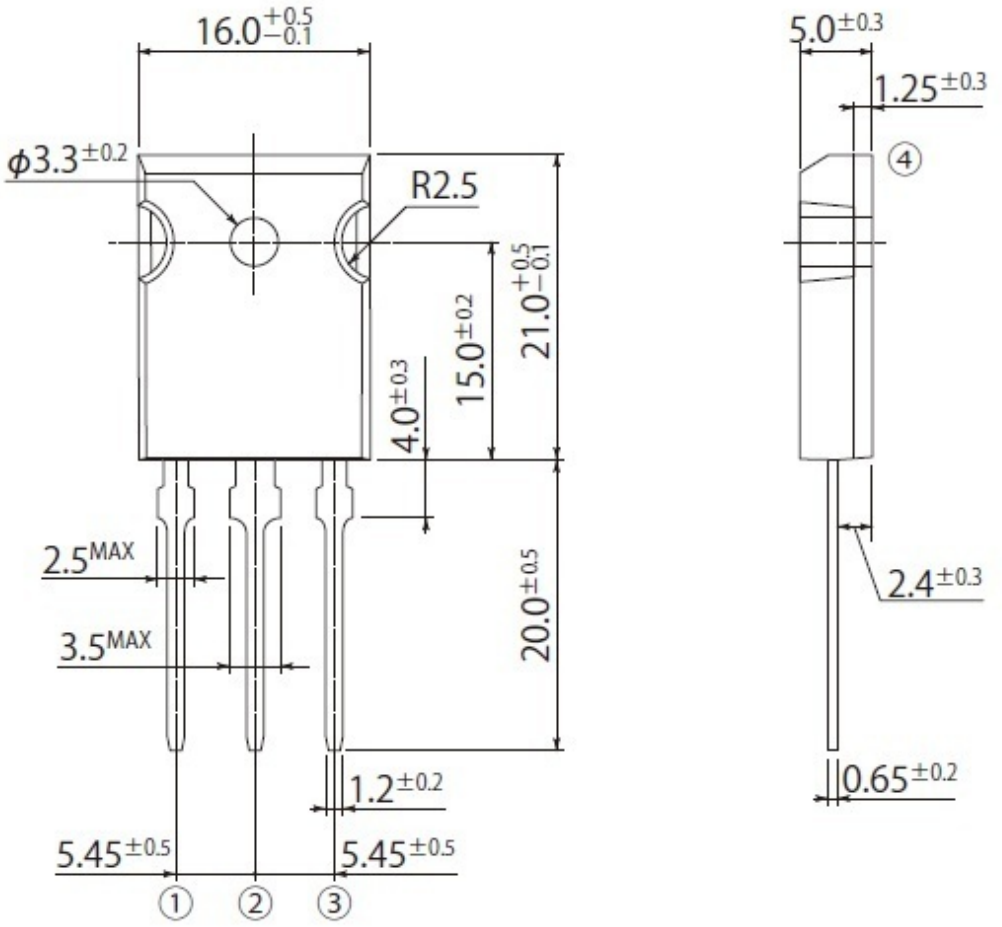
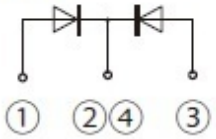


Fig. K5-2



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Notes

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   【Standard applications】
   Computers, office automation and other office equipment, communication terminals, test and measurement equipment, audio/visual equipment, amusement equipment, consumer electronics, machine tools, personal electronic equipment, industrial equipment, etc.
   【Special applications】
   Transportation equipment (vehicles, ships, etc.), trunk-line communication equipment, traffic signal control systems, anti-disaster/crime systems, safety equipment, medical equipment, etc.
   【Specific applications】
   Nuclear reactor control systems, aircraft, aerospace equipment, submarine repeaters, life support equipment and systems, etc.
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