ShinDengen

S20LC20UST

Fast Recovery Diodes
200V, 20A

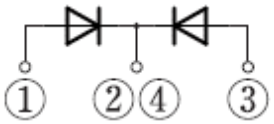
Feature

- 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		-55 to 150	°C
Repetitive peak reverse voltage	V_{RRM}		200	V
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, Rating for each diode IF(AV)/2, With heatsink, Tc=126°C	20	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle, Peak value, Tj=25°C	120	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			0.96	V
Reverse current	I_R	VR=200V, Pulse measurement, Per diode			10	μA
Reverse recovery time	trr	IF=0.5A, IR=1.0A, 0.25IR, Per Diode			25	ns
Total capacitance	Ct	f=1MHz, VR=10V, Per diode		80		pF
Thermal resistance	Rth(j-c)	Junction to case, With heatsink			1.2	°C/W

※ ：See the original Specifications

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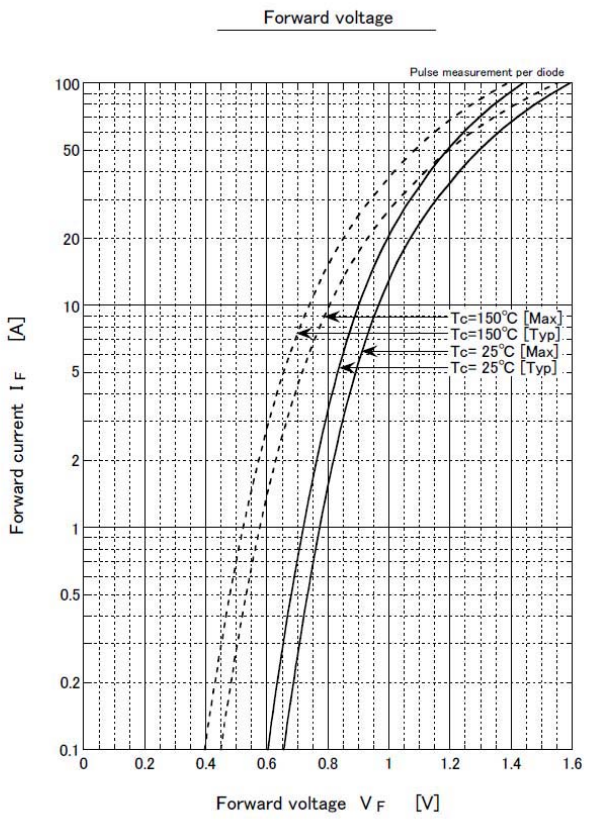
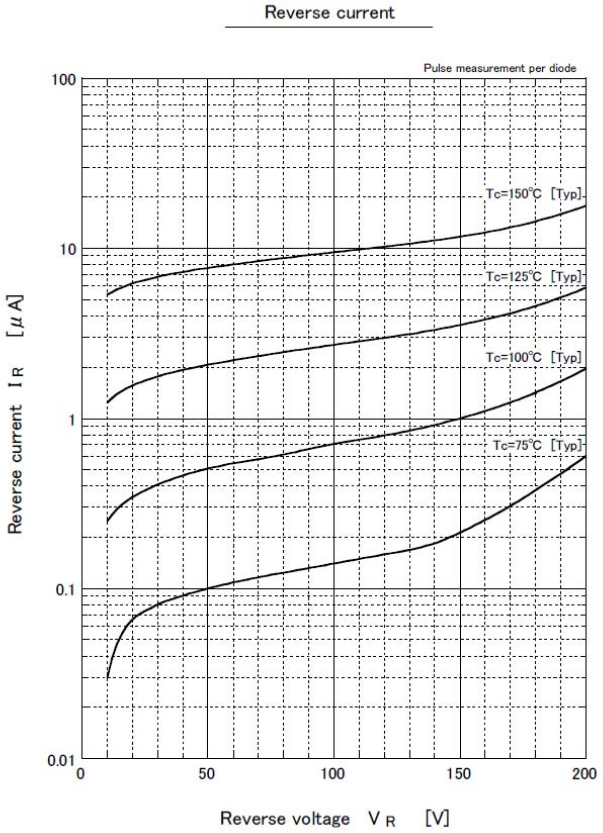
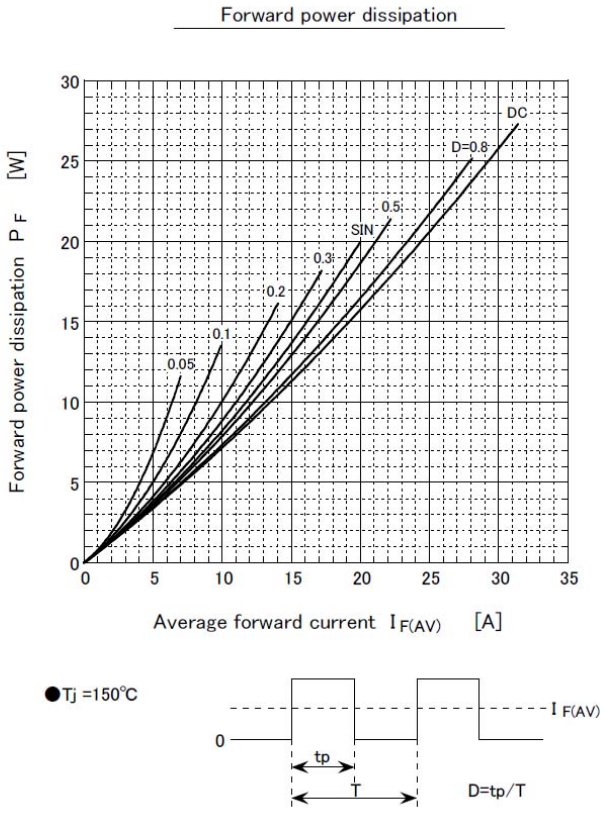
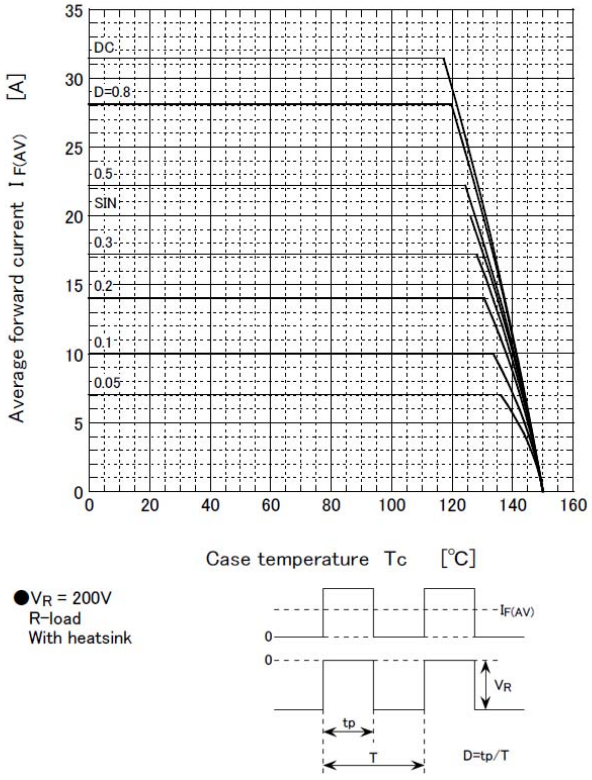
CHARACTERISTIC DIAGRAMS









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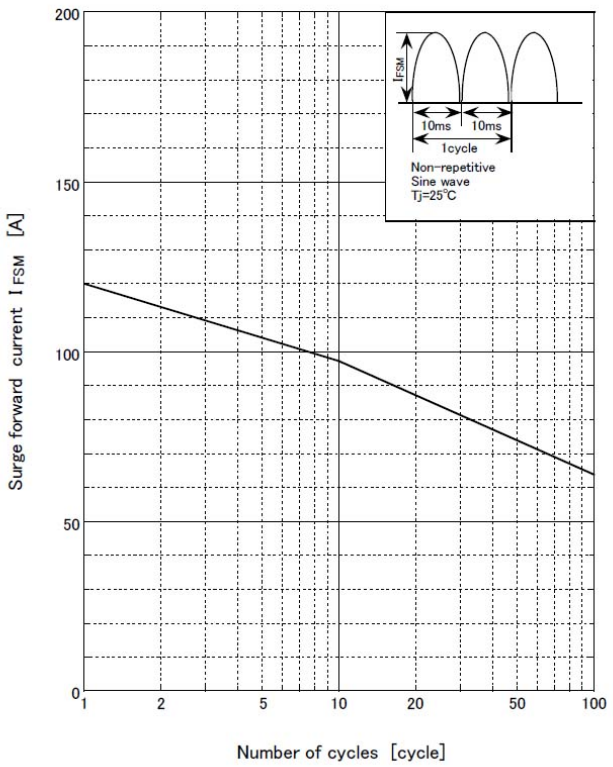
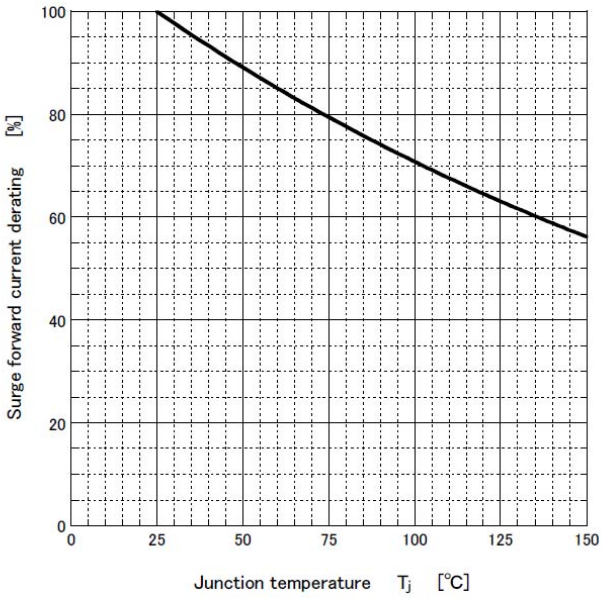
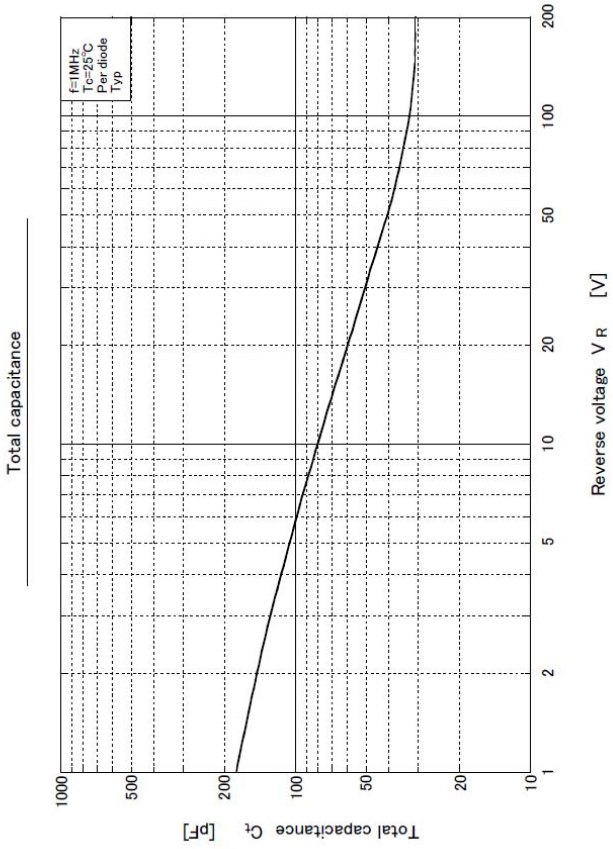
Surge forward current capability



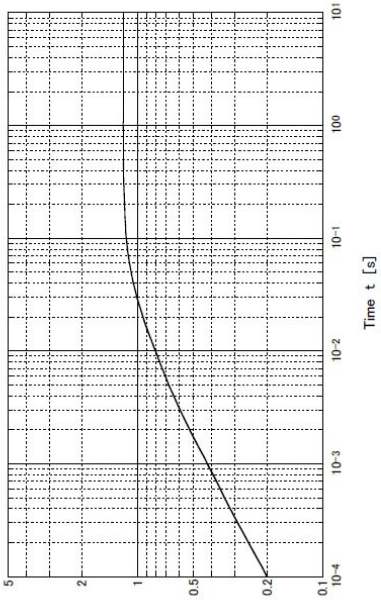
Surge forward current derating
vs Junction temperature



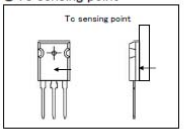
Total capacitance



Transient thermal impedance



●Tc sensing point



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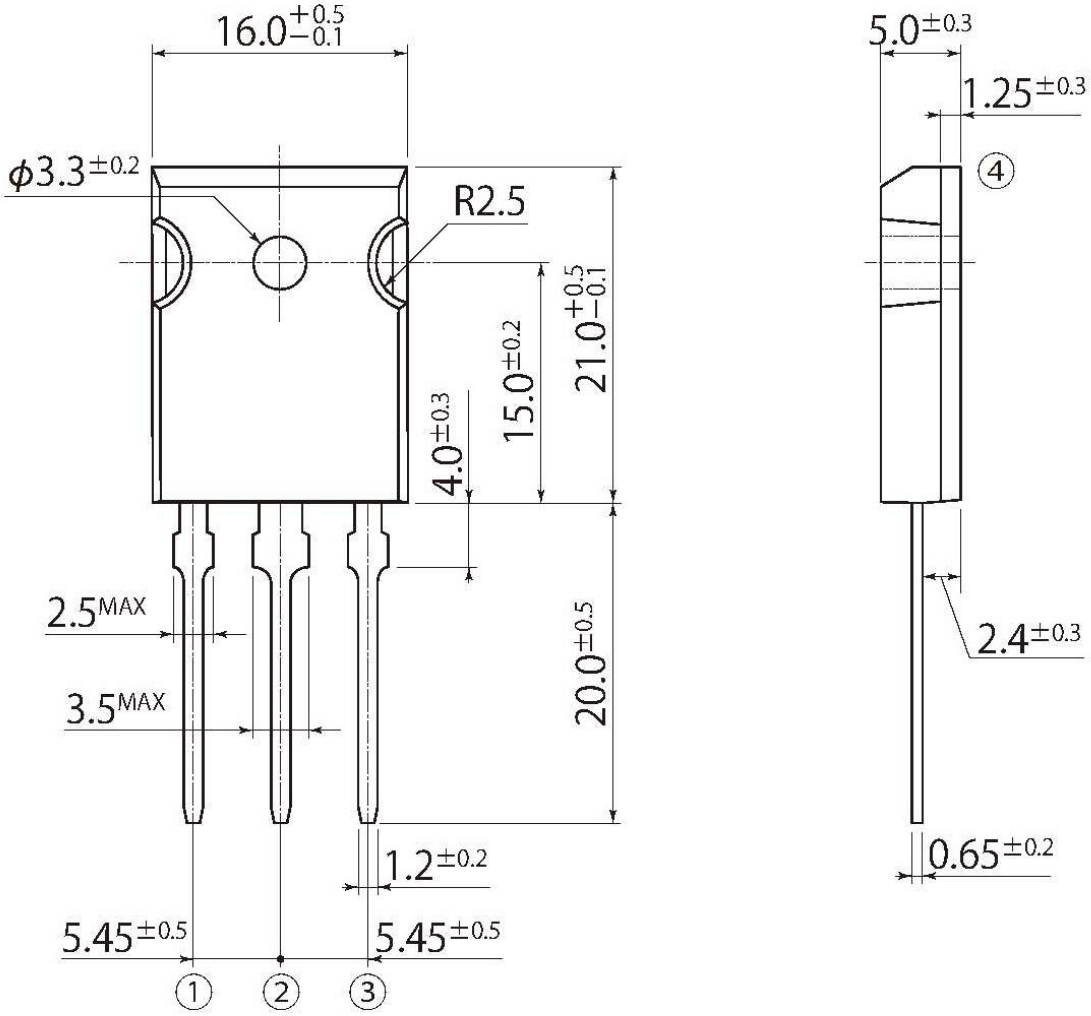
Outline Dimensions

unit:mm

K5

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



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