

S40HC1R5T

Schottky Barrier Diodes

15V, 40A

Feature

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

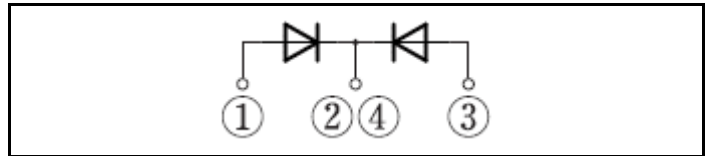
OUTLINE

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 125	$^\circ\text{C}$
Junction temperature	T_j		125	$^\circ\text{C}$
Repetitive peak reverse voltage	V_{RRM}		15	V
Average forward current	$I_{F(AV)}$	50Hz sine wave, Resistance load, Rating for each diode $I_{F(AV)}/2$, $T_c=111^\circ\text{C}$	40	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, $T_j=25^\circ\text{C}$	450	A
Surge forward current	I_{FSM1}	$t_p=1\text{ms}$, Sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ\text{C}$	980	A
Mounting torque	TOR	(Recommended torque : $0.5\text{N}\cdot\text{m}$)	0.8	$\text{N}\cdot\text{m}$

※ :See the original Specifications

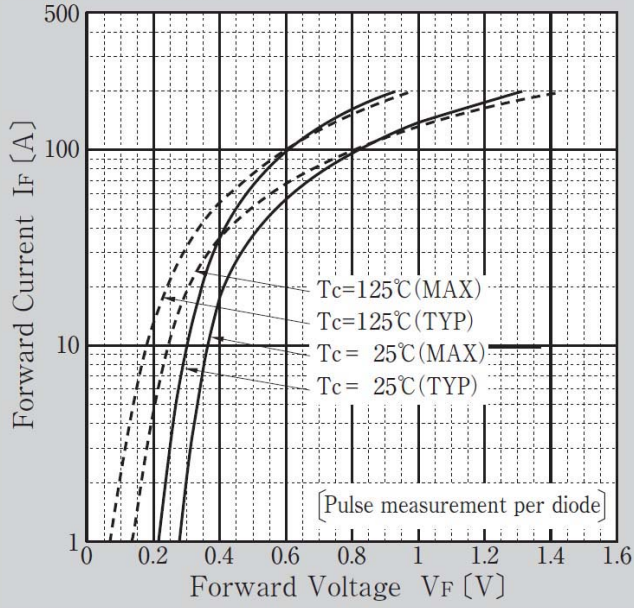
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	I _F =20A, Pulse measurement, per diode		0.36	0.41	V
Reverse current	I _R	V _R =15V, Pulse measurement, per diode			10	mA
Total capacitance	C _t	f=1MHz, V _R =10V, per diode		960		pF
Thermal resistance	R _{th(j-c)}	Junction to case			0.6	°C/W

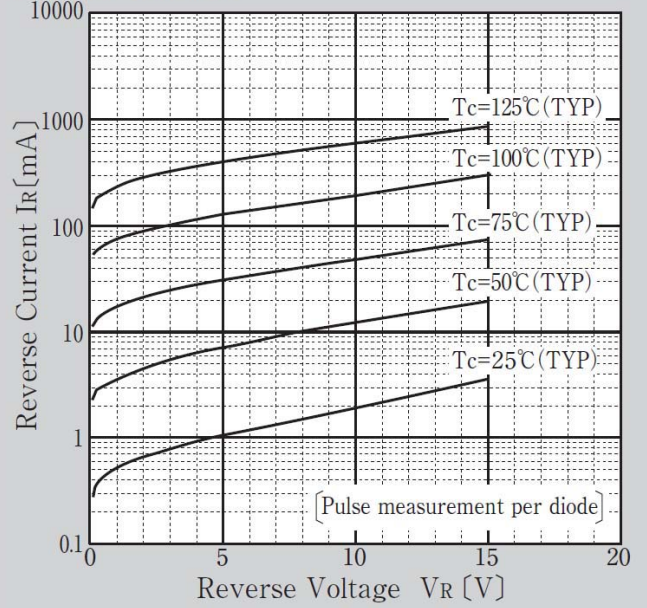
* : See the original Specifications

CHARACTERISTIC DIAGRAMS

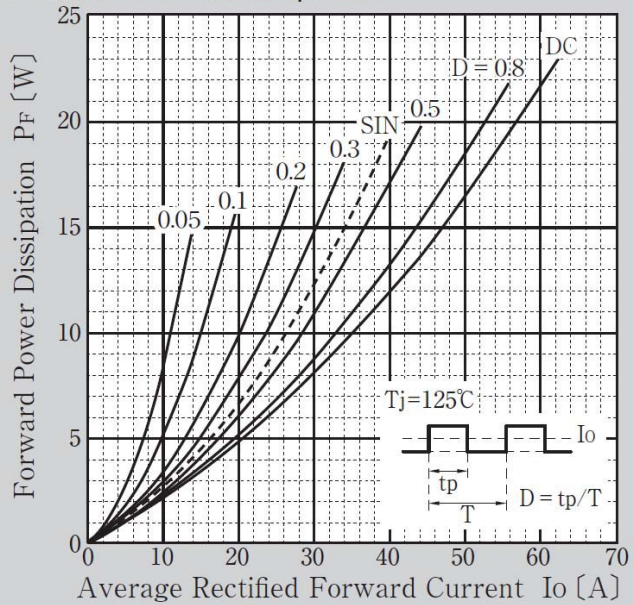
Forward Voltage



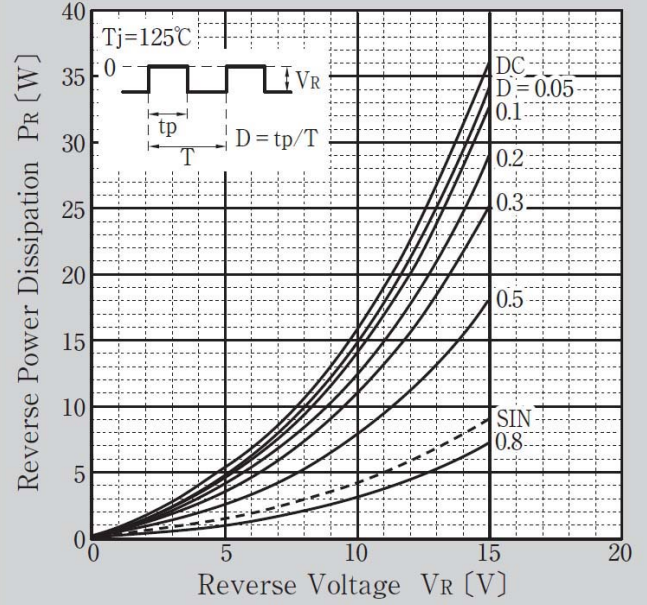
Reverse Current

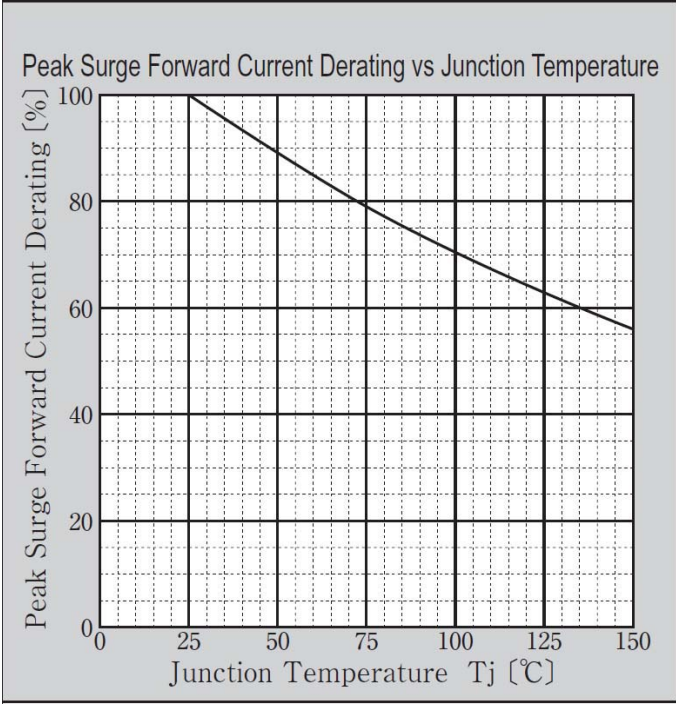
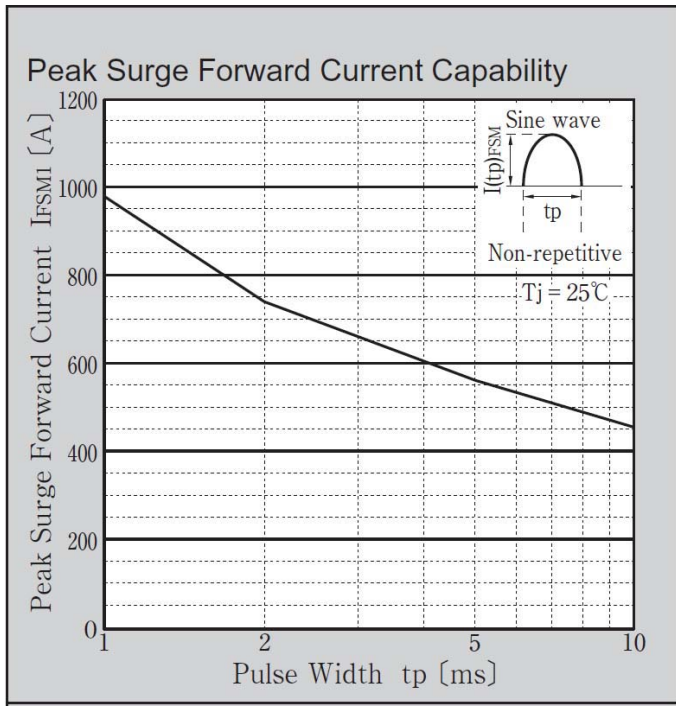
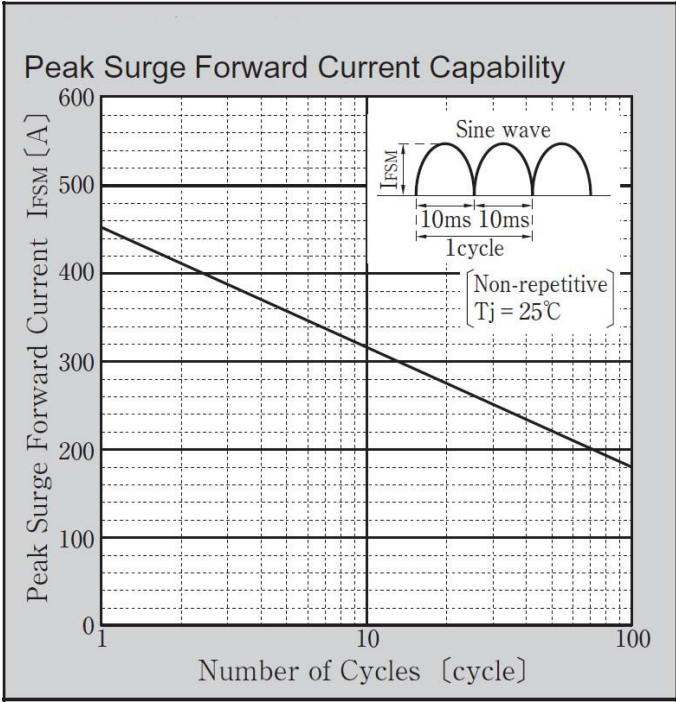
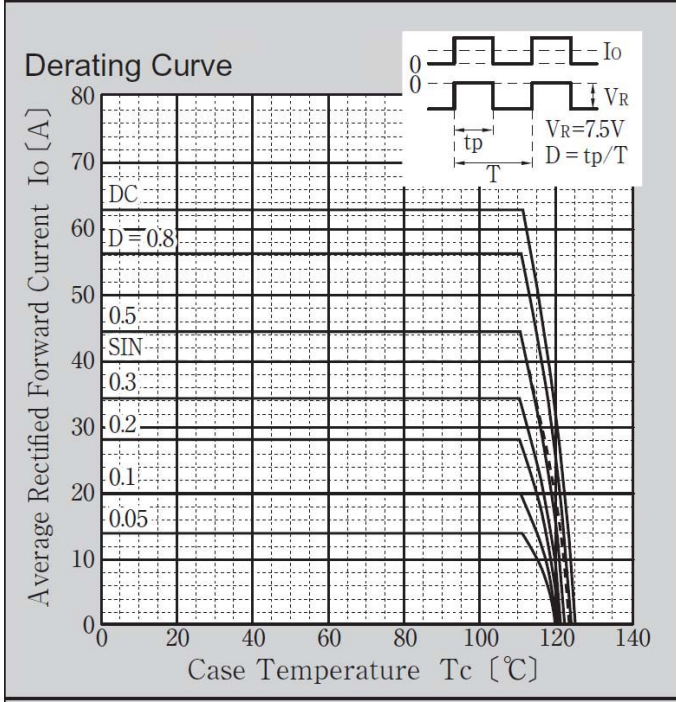


Forward Power Dissipation

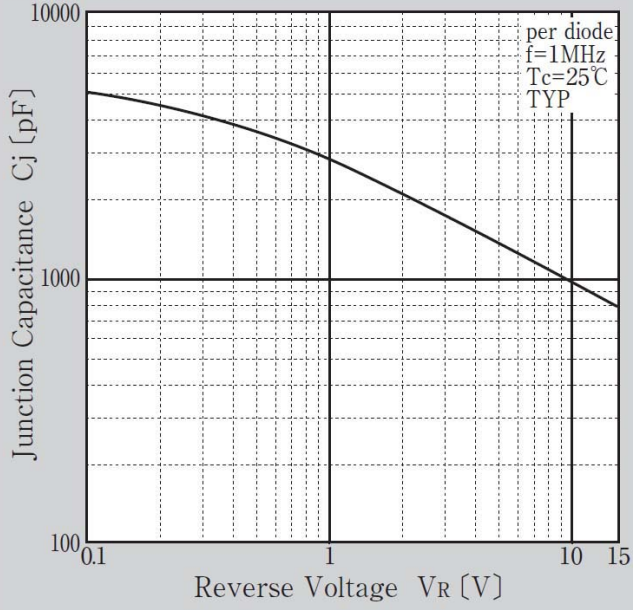


Reverse Power Dissipation

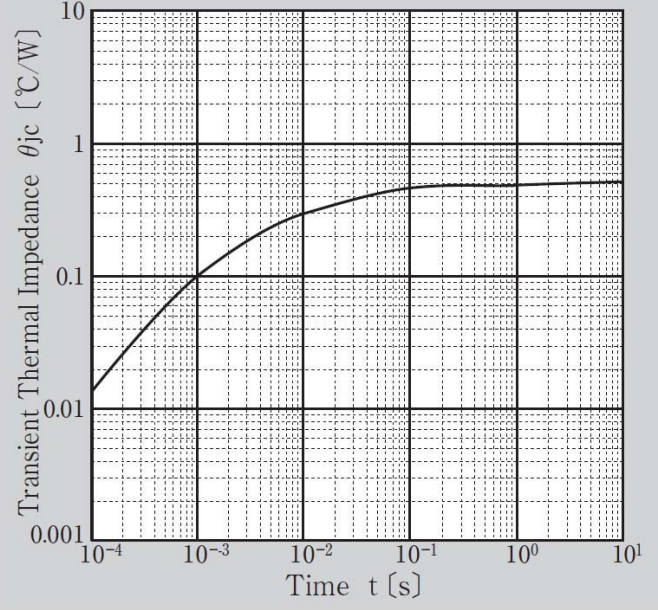




Junction Capacitance

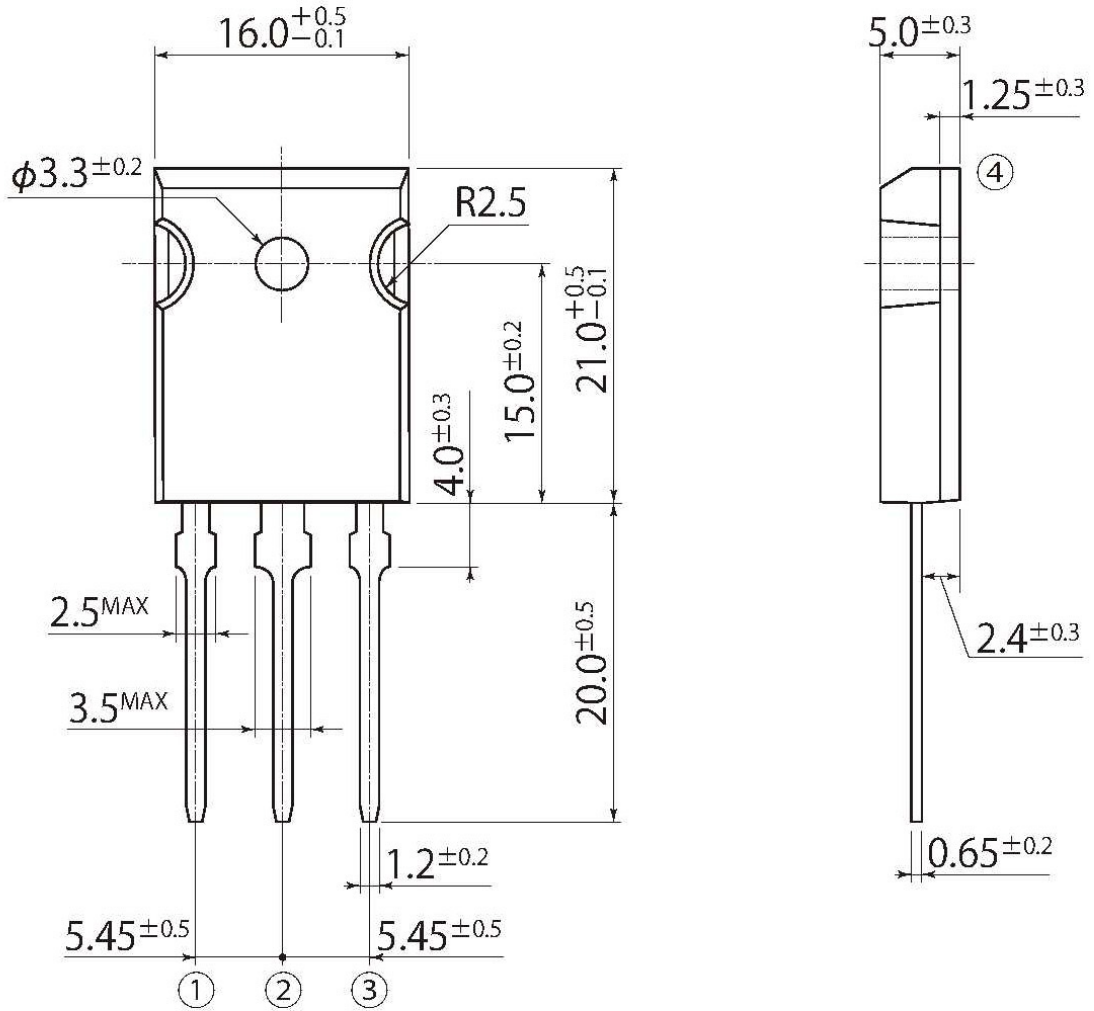


Transient Thermal Impedance



K5

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



Notes

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