

# S40HC1R5T

## Schottky Barrier Diodes

15V, 40A

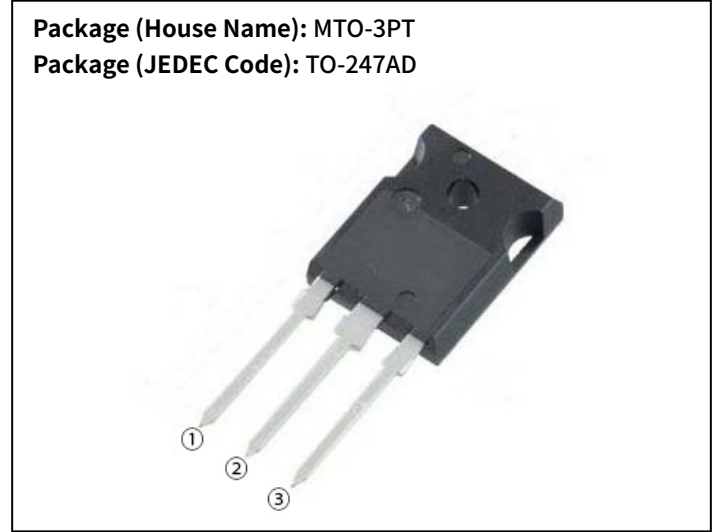
### Feature

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

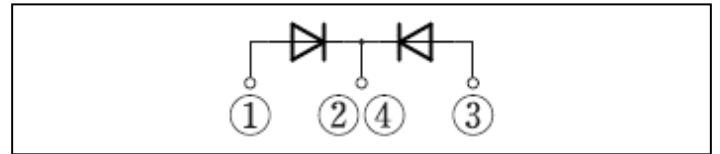
### OUTLINE

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, 1cycle, 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

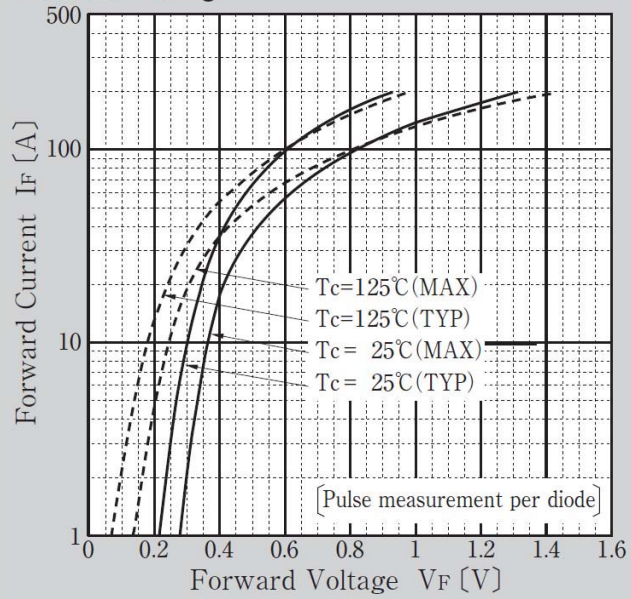
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	IF=20A, Pulse measurement, per diode		0.36	0.41	V
Reverse current	I <sub>R</sub>	VR=15V, Pulse measurement, per diode			10	mA
Total capacitance	Ct	f=1MHz, VR=10V, per diode		960		pF
Thermal resistance	Rth(j-c)	Junction to case			0.6	°C/W

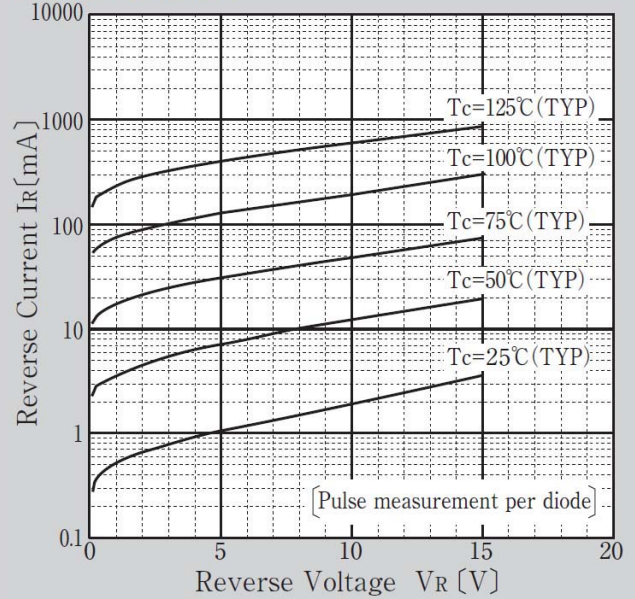
※ :See the original Specifications

# CHARACTERISTIC DIAGRAMS

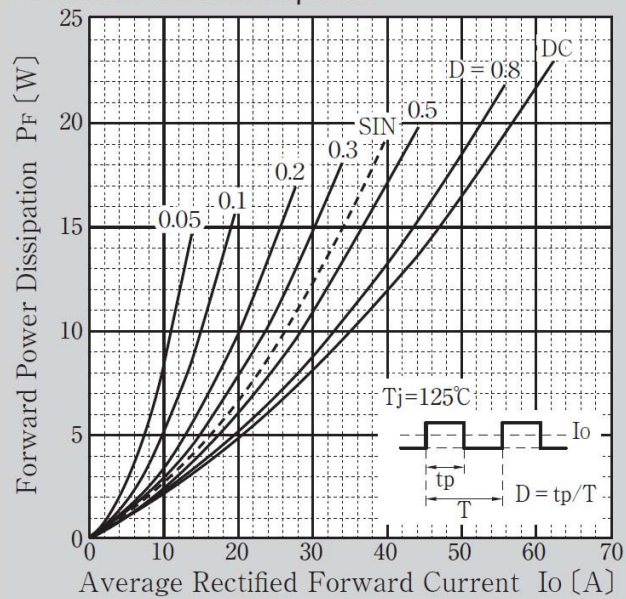
### Forward Voltage



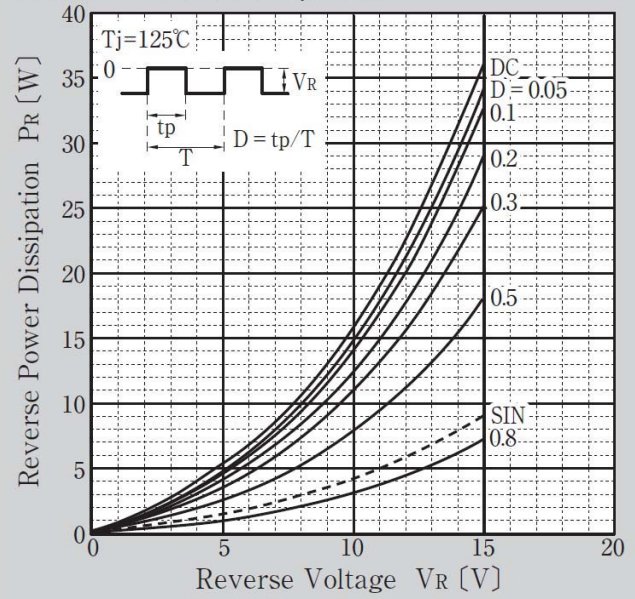
### Reverse Current

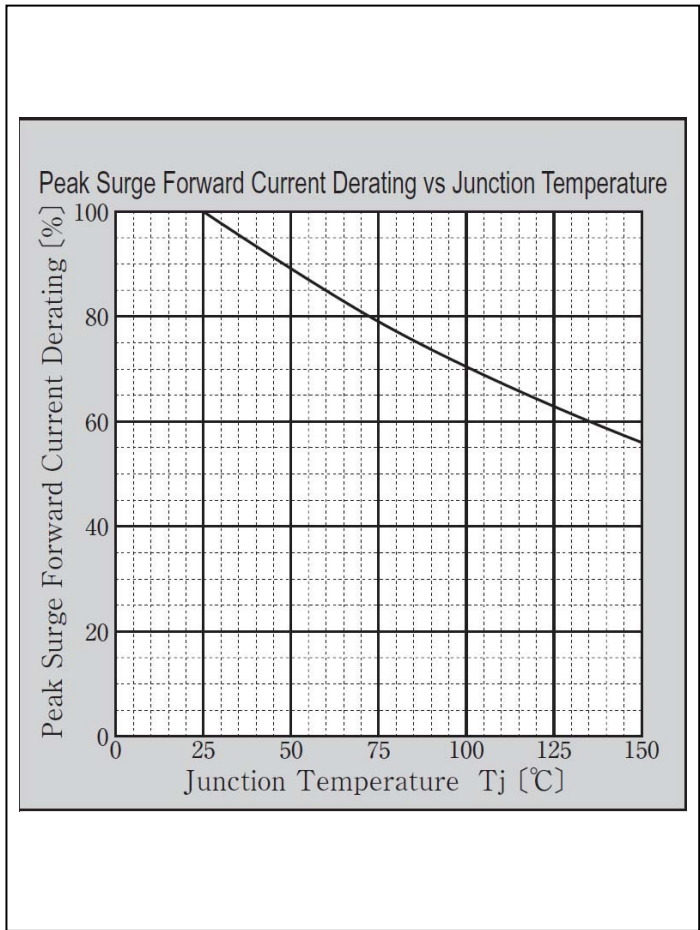
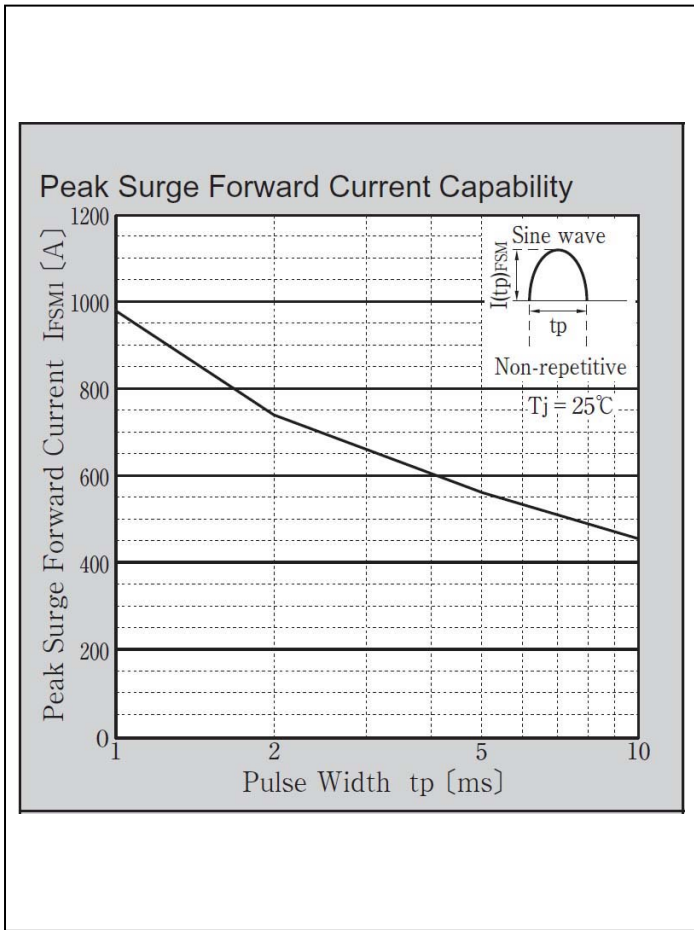
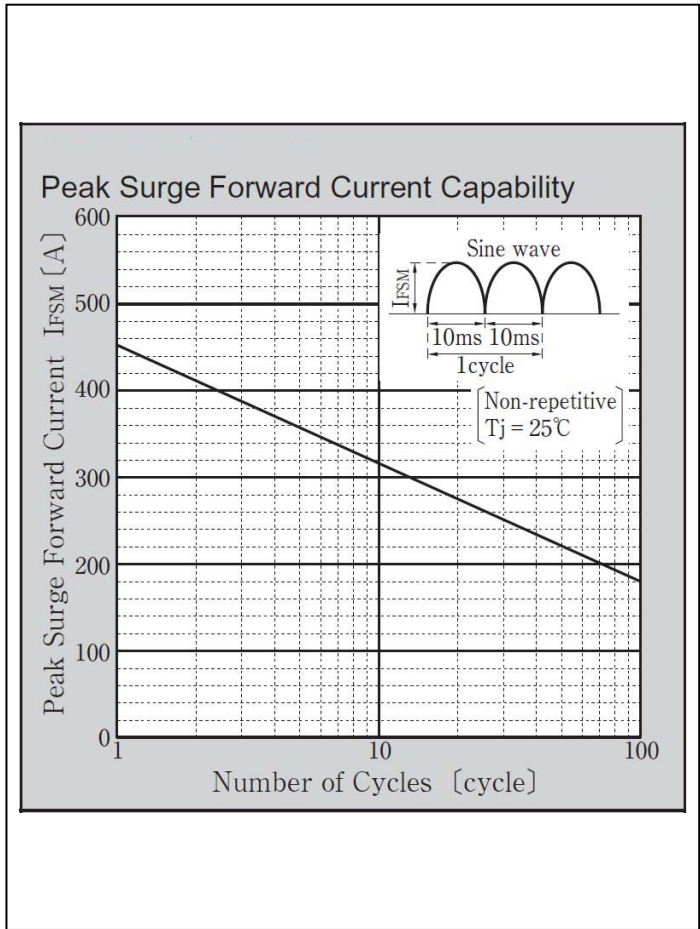
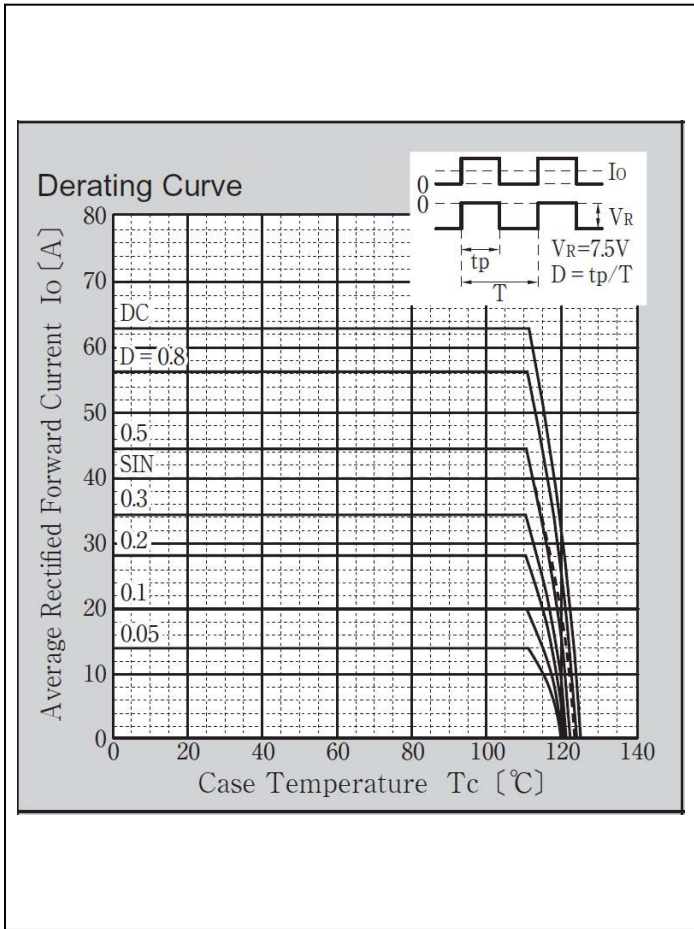


### Forward Power Dissipation

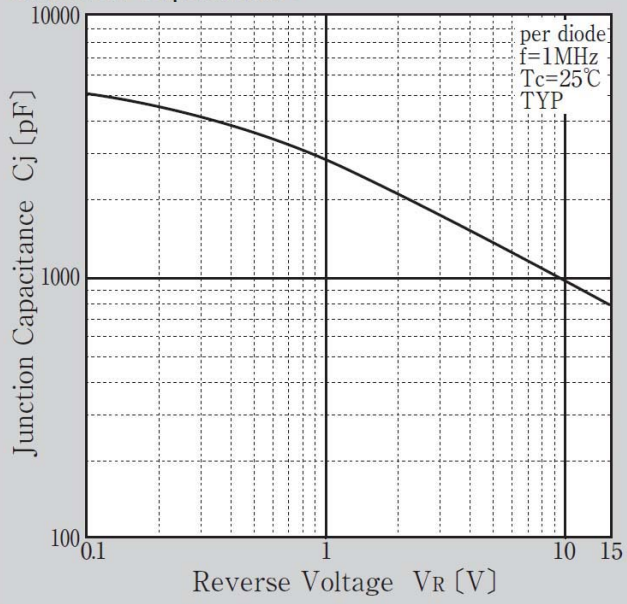


### Reverse Power Dissipation

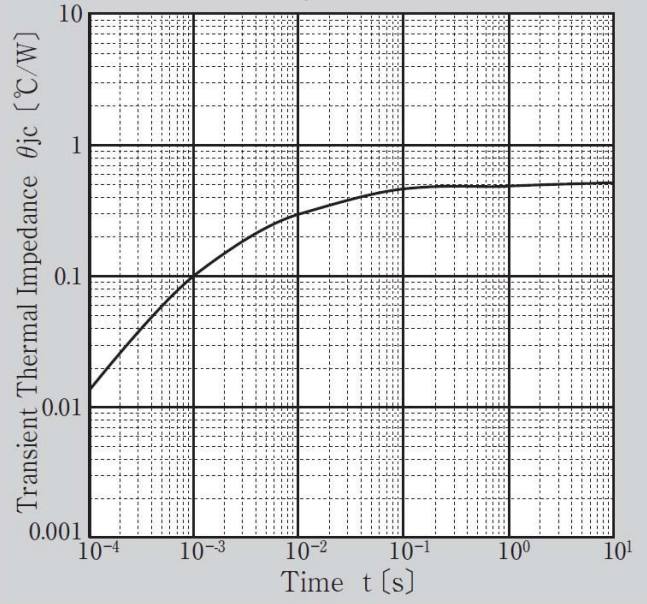




### Junction Capacitance

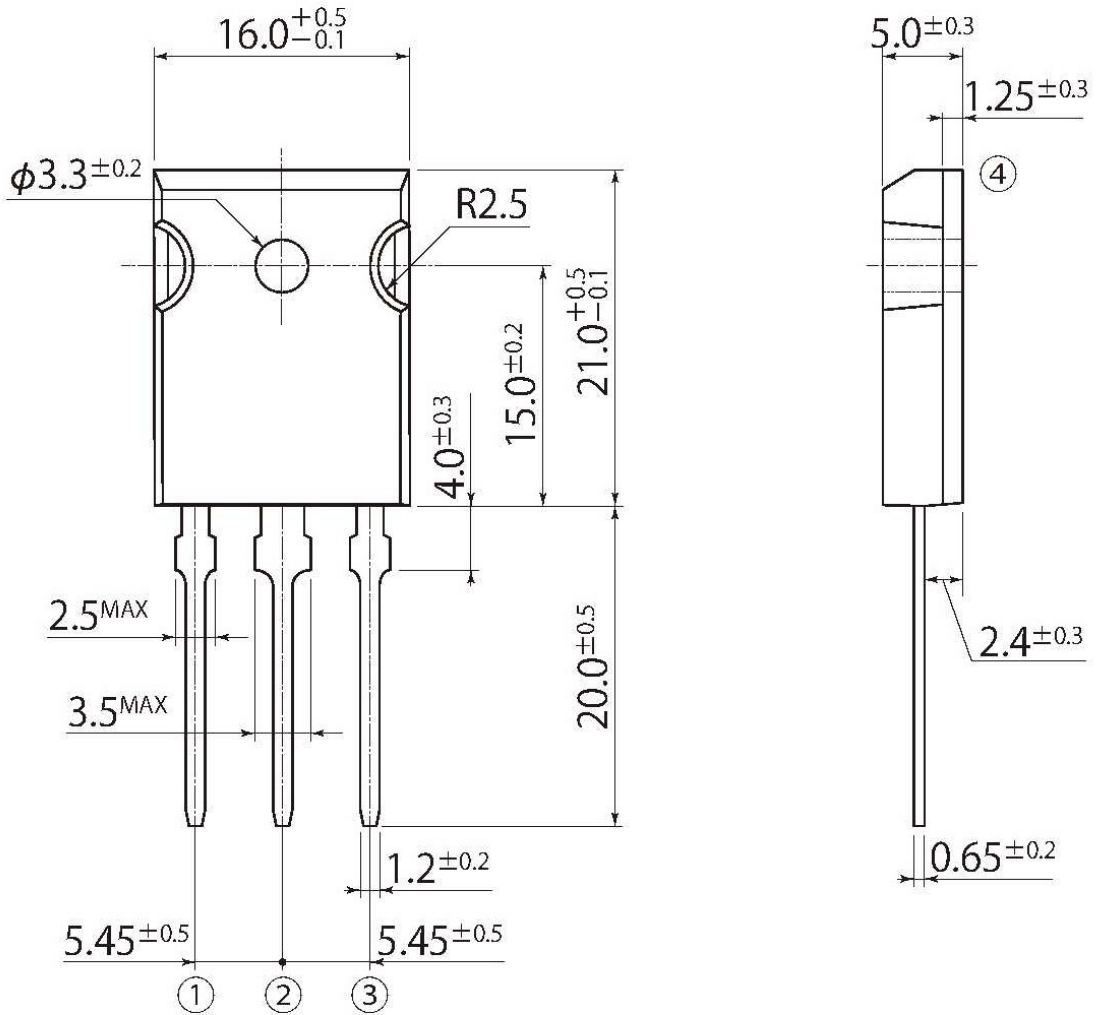


### Transient Thermal Impedance



K5

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



## Notes

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