

S90T15V

Schottky Barrier Diodes 150V, 90A

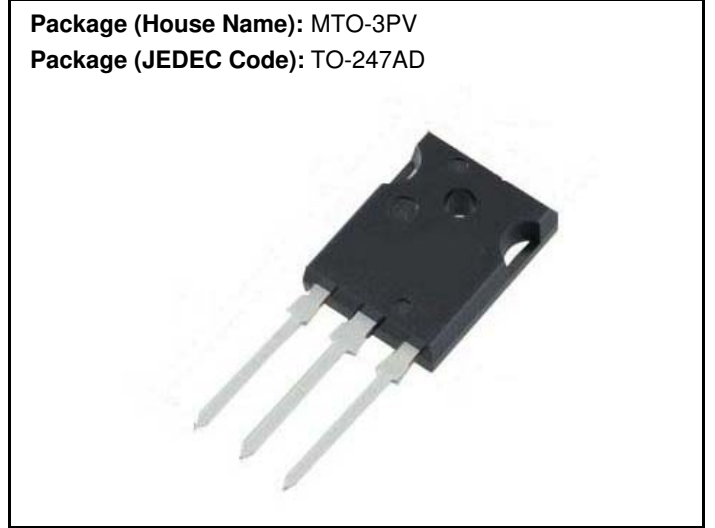
Feature

- High Voltage
- High Recovery Speed
- Low I_R
- Available for automotive use
- Pb free terminal
- RoHS:Yes

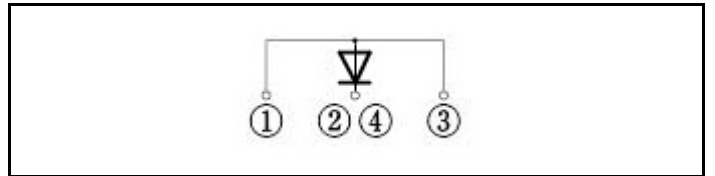
OUTLINE

Package (House Name): MTO-3PV

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 150	$^\circ\text{C}$
Junction temperature	T_j		150	$^\circ\text{C}$
Repetitive peak reverse voltage	V_{RRM}		150	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, $T_c=122^\circ\text{C}$ *	90	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, $T_j=25^\circ\text{C}$ *	1400	A
Mounting torque	TOR	(Recommended torque : $0.5\text{N}\cdot\text{m}$)	0.8	$\text{N}\cdot\text{m}$

* :See the original Specifications

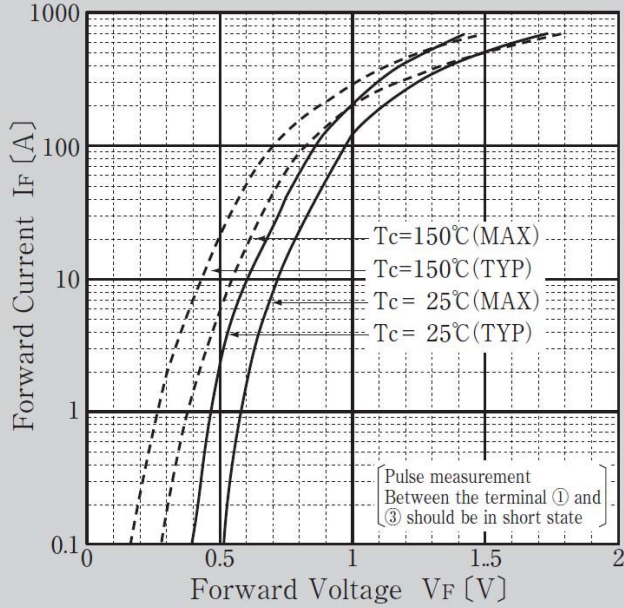
Electrical Characteristics (unless otherwise specified : $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	$I_F=90\text{A}$, Pulse measurement *			0.95	V
Reverse current	I_R	$V_R=150\text{V}$, Pulse measurement			0.35	mA
Total capacitance	C_t	$f=1\text{MHz}$, $V_R=10\text{V}$		1690		pF
Thermal resistance	$R_{th(j-c)}$	Junction to case			0.3	$^\circ\text{C}/\text{W}$

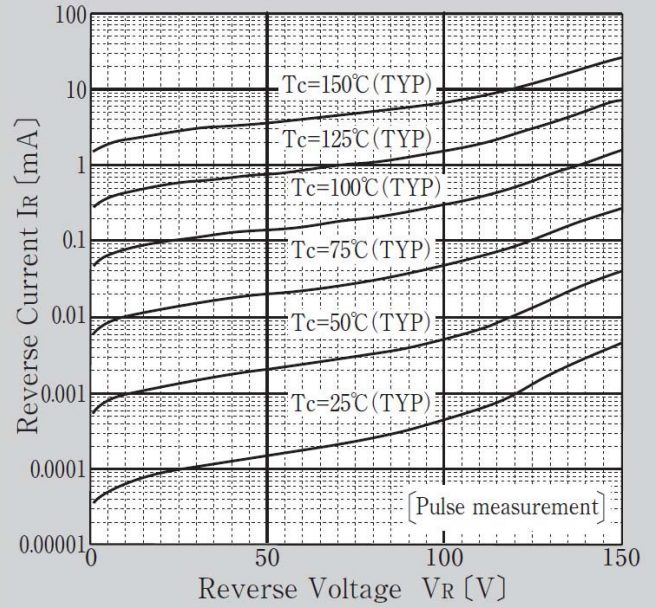
* :See the original Specifications

CHARACTERISTIC DIAGRAMS

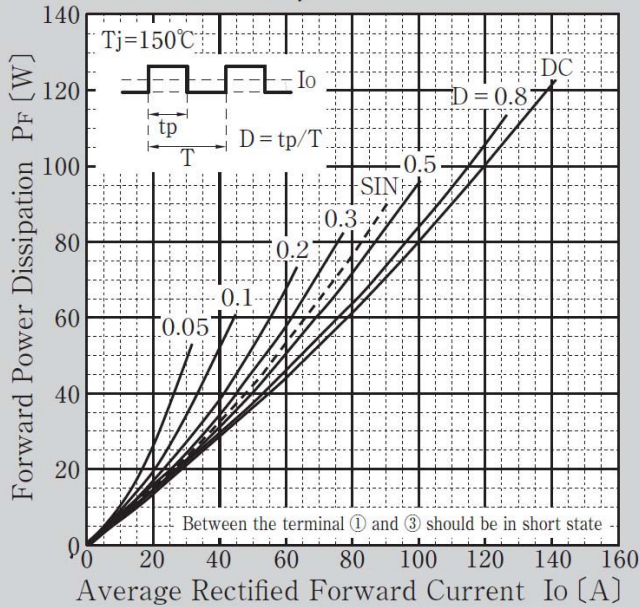
Forward Voltage



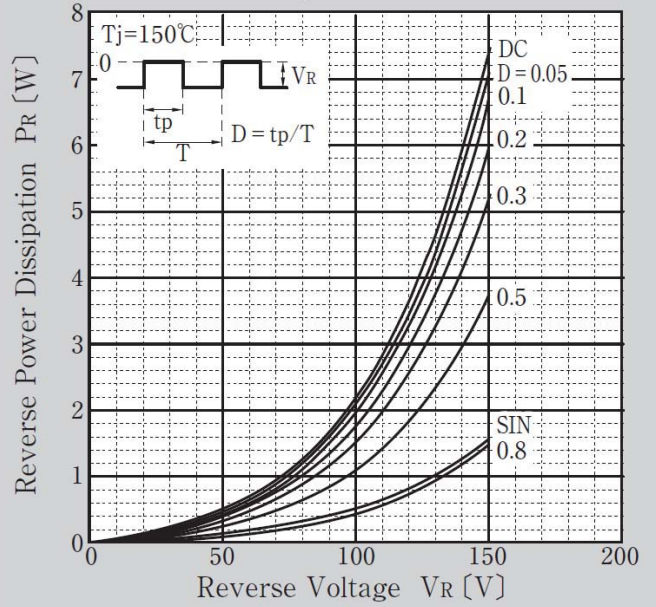
Reverse Current

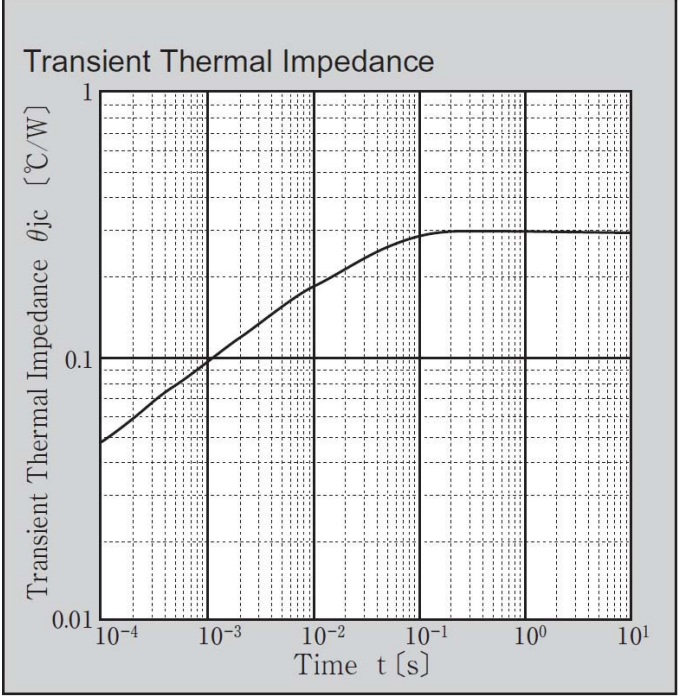
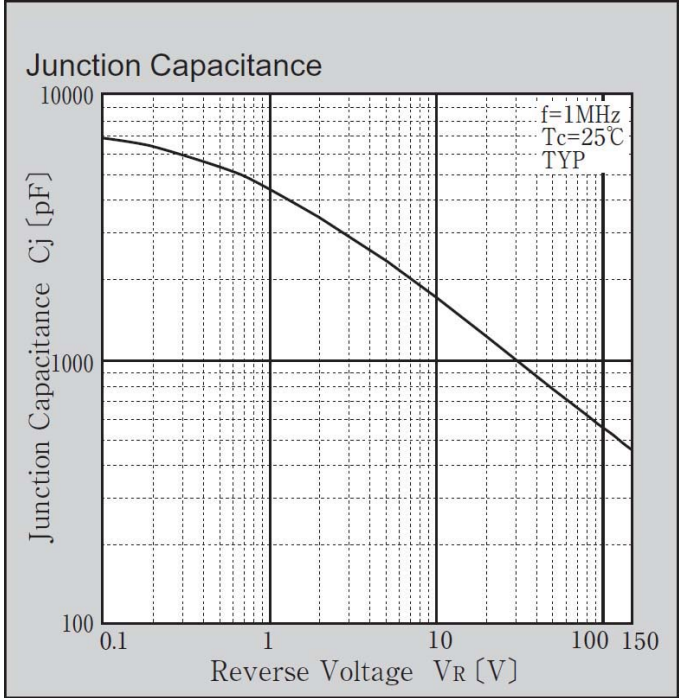
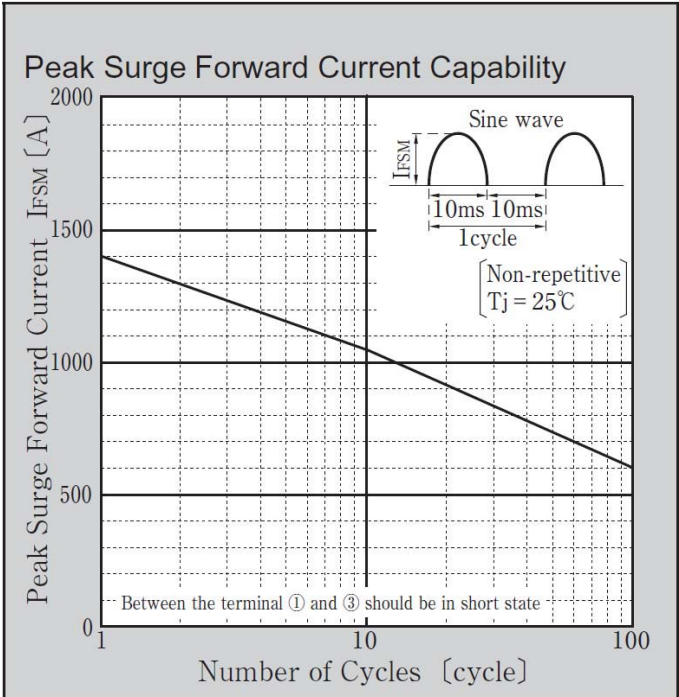
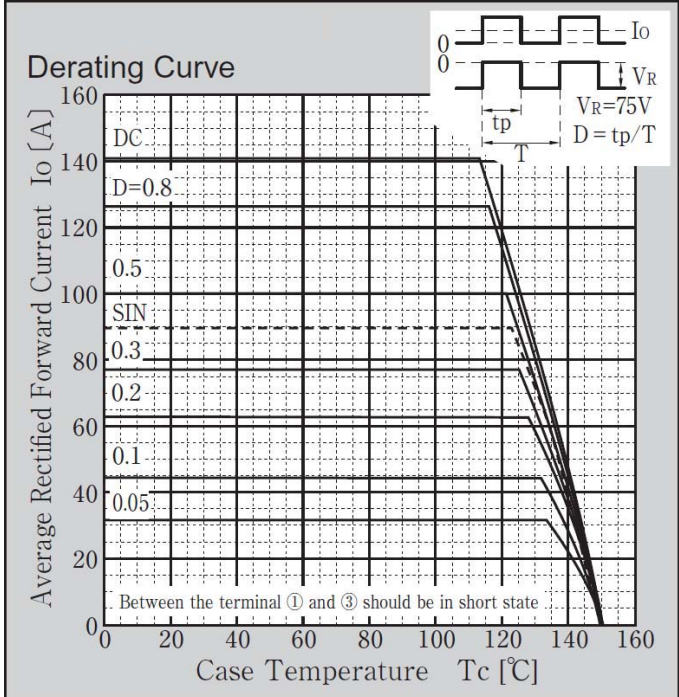


Forward Power Dissipation



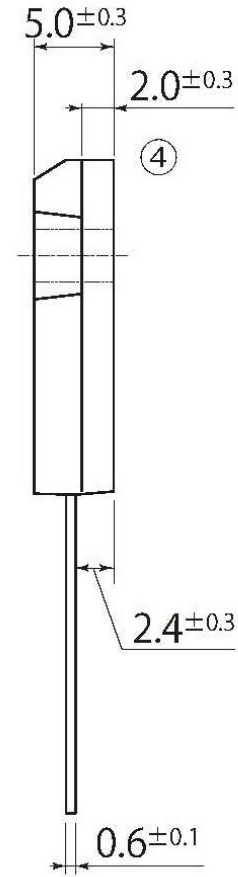
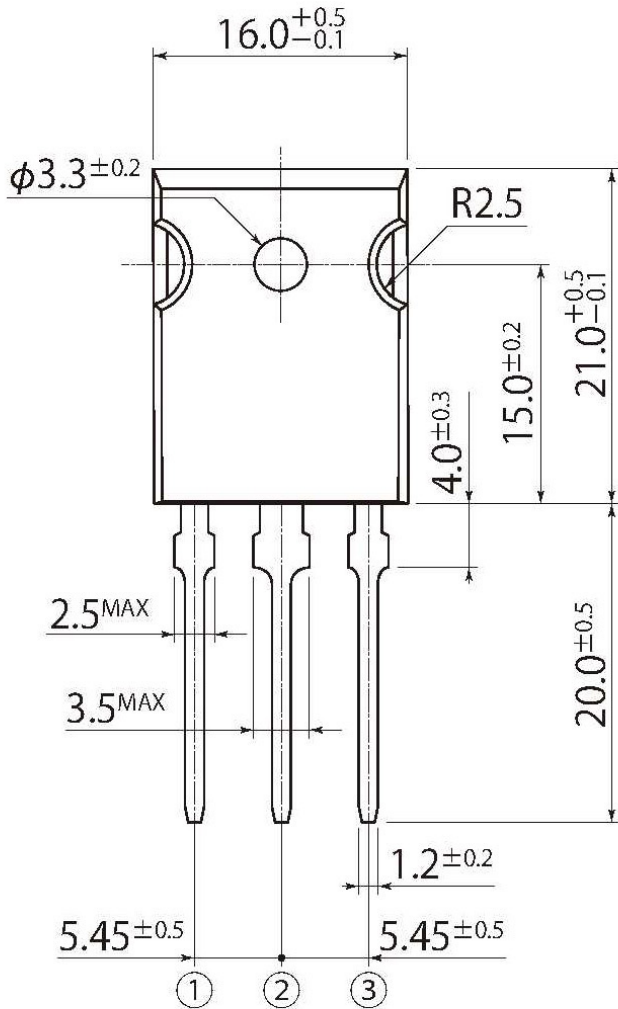
Reverse Power Dissipation





K7

JEDEC Code	TO-247AD
JEITA Code	—
House Name	MTO-3PV



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