

S20SC65WV

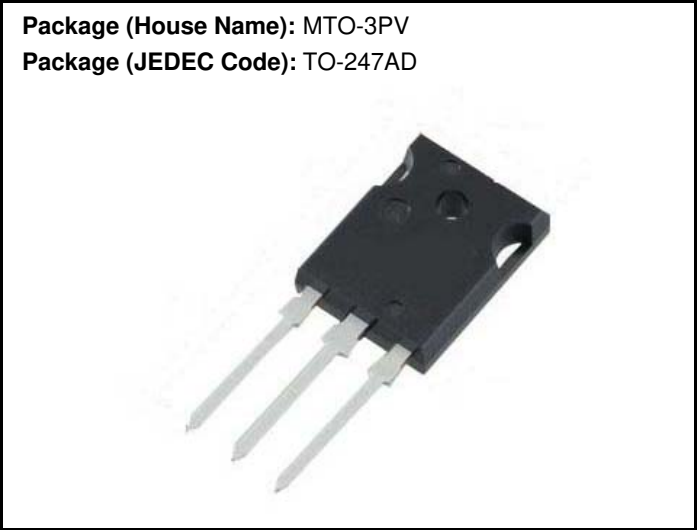
Schottky Barrier Diodes
650V, 20A

Feature

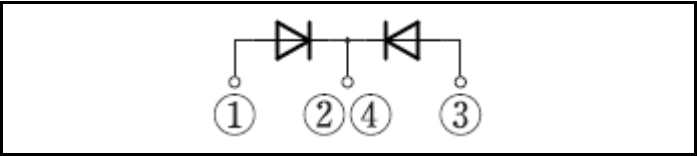
- SiCSBD
- Ultra High Recovery Speed
- Low Noise
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): MTO-3PV
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 175	°C
Junction temperature	Tj		-55 to 175	°C
Repetitive peak reverse voltage	VRRM		650	V
Average forward current	IF(AV)	DC, Resistance load, Rating for each diode IF(AV)/2, With heatsink, Tc=125°C	20	A
Surge forward current	IFSM	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C	55	A
Surge forward current	IFSM1	tp=1ms, Sine wave, Non-repetitive, Peak value, Per diode, Tj=25°C	125	A
Mounting torque	TOR	(Recommended torque : 0.5N・m)	0.8	N・m

※ :See the original Specifications

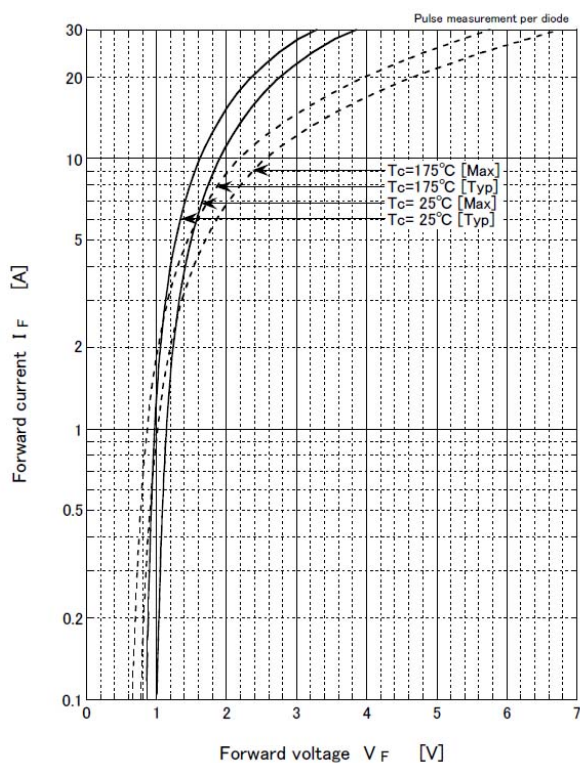
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	IF=10A, Pulse measurement, per diode		1.62	1.9	V
Reverse current	I _R	VR=650V, Pulse measurement, per diode			0.1	mA
Total capacitance	C _t	f=1MHz, VR=10V, per diode		170		pF
Thermal resistance	R _{th(j-c)}	Junction to case, With heatsink			1	°C/W

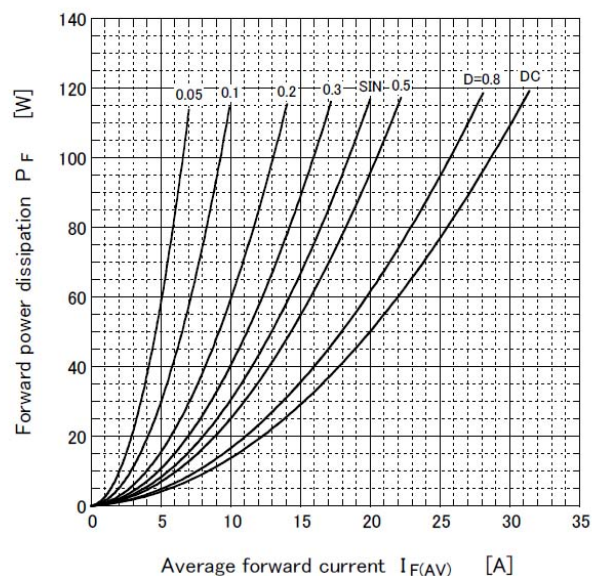
※ : See the original Specifications

CHARACTERISTIC DIAGRAMS

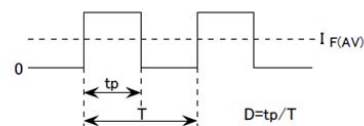
Forward voltage



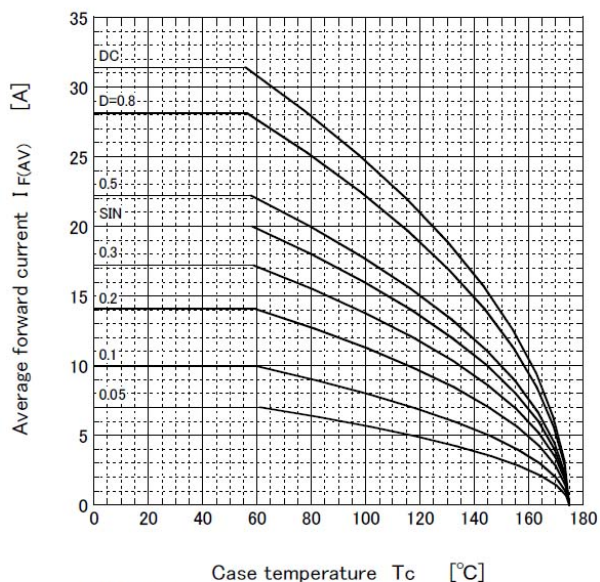
Forward power dissipation



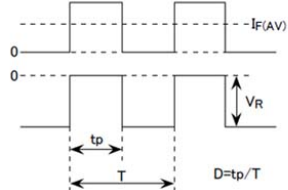
● $T_J = 175^\circ\text{C}$



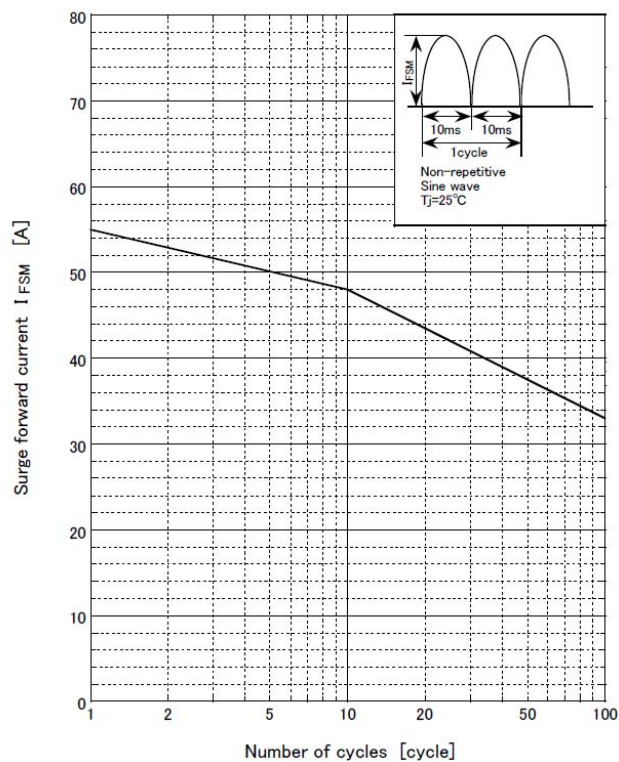
Derating curve

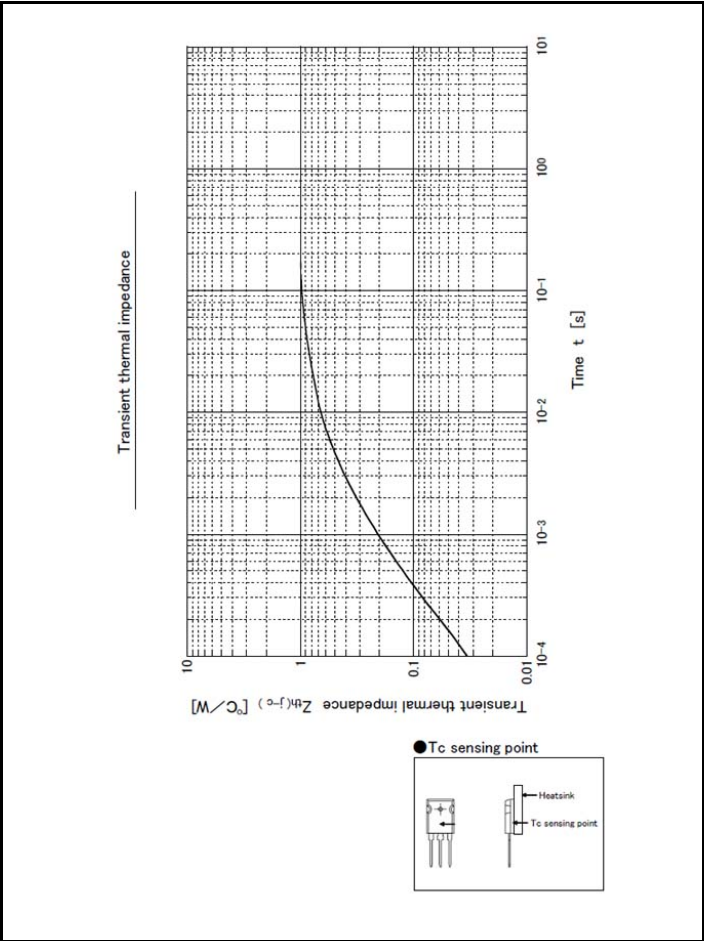
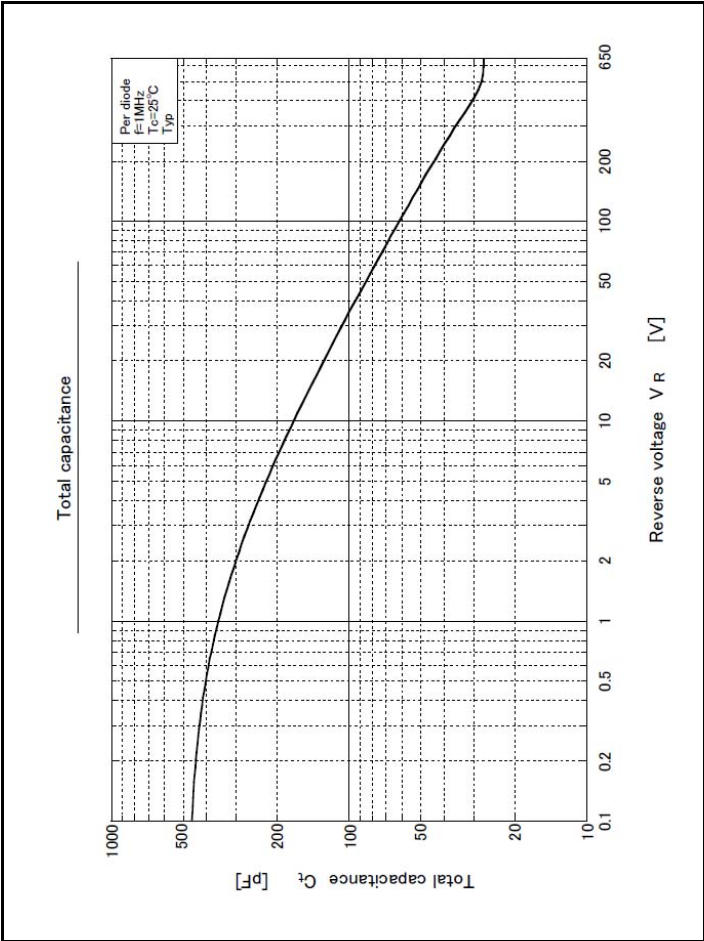
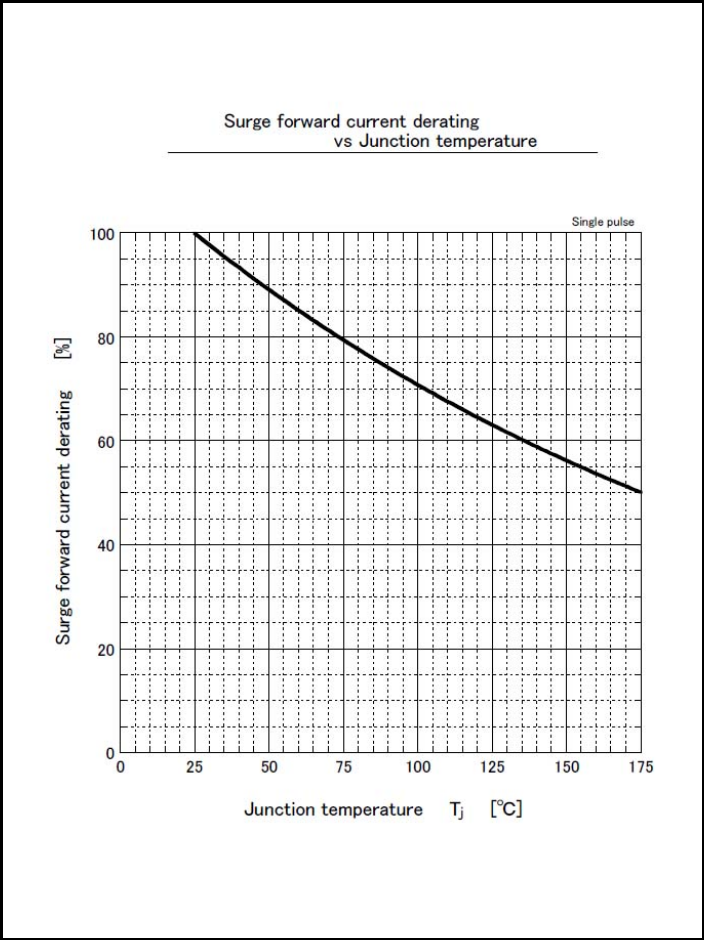
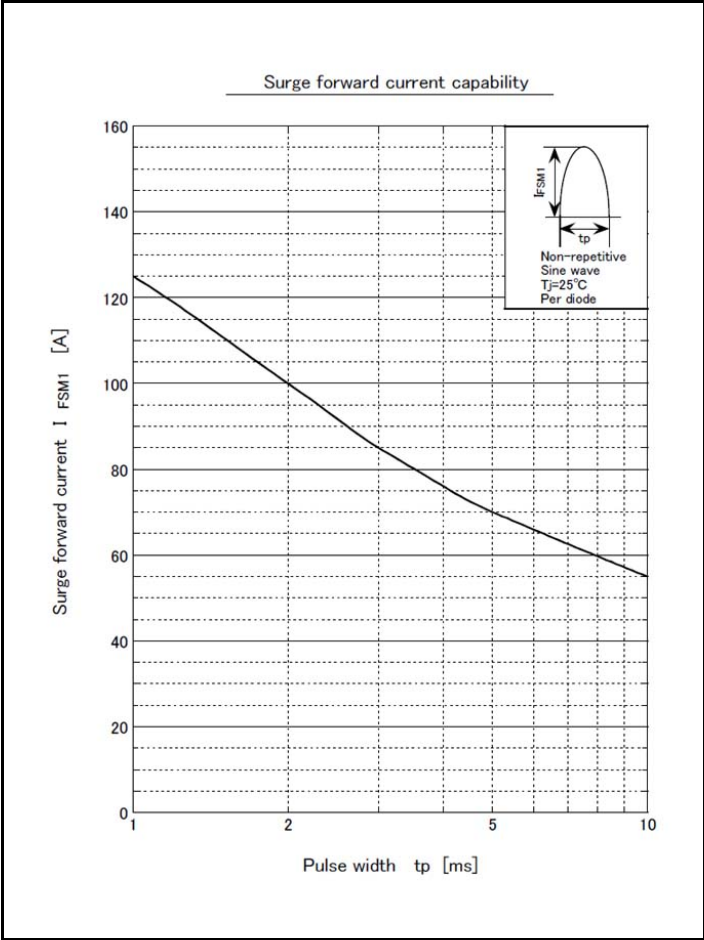


● $V_R = 325\text{V}$
R-load
With heatsink



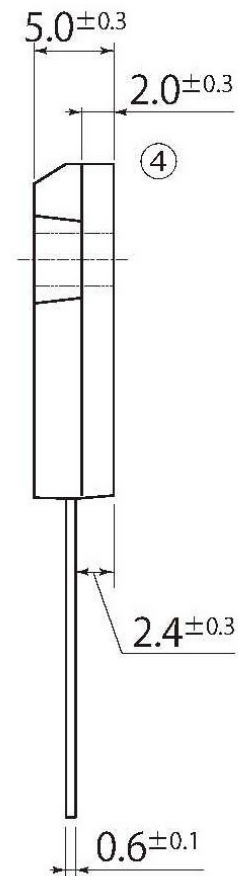
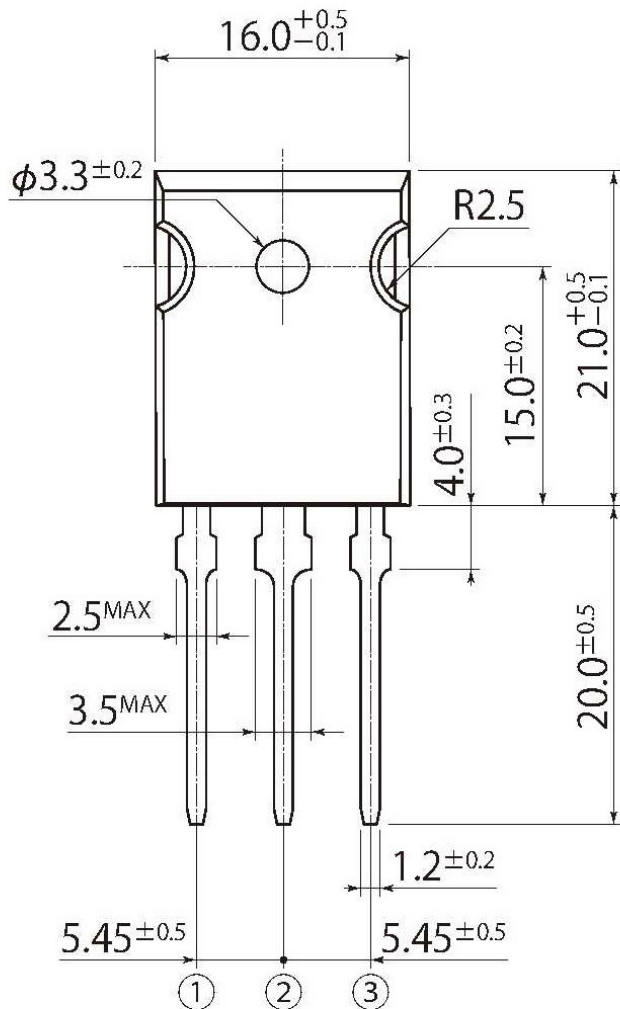
Surge forward current capability





K7

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



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