

WSV20H200D, WSAT20H200D, WSCT20H200D-HAF

Silicon Epitaxial Trench Schottky Barrier Rectifiers

Reverse Voltage - 200 V
Forward Current - 20 A

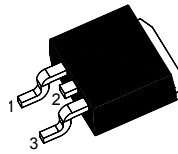
Features

- Low forward voltage drop
- High Temperature Stability
- Halogen and Antimony Free(HAF), RoHS compliant

Applications

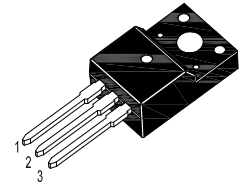
- For use in high frequency converters
- Switching power supplies

WSV20H200D



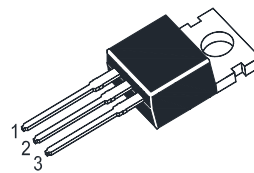
1.Anode 2.Cathode 3.Anode
TO-263 Plastic Package

WSAT20H200D

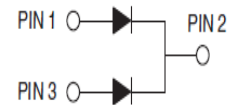


1.Anode 2.Cathode 3.Anode
TO-220F Plastic Package

WSCT20H200D



1.Anode 2.Cathode 3.Anode
TO-220FB Plastic Package



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	V
Average Rectified Forward Current	$I_{F(AV)}$	20	A
Peak Forward Surge Current 8.3 ms Single half sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	160	A
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Thermal Characteristics (at $T_a = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	WSV20 H200D	WSAT20 H200D	WSCT20 H200D	Unit
Typical Thermal Resistance-Junction to Case	$R_{\theta JC}$	3.5	4.5	3	$^\circ\text{C/W}$

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

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_R = 50 \mu\text{A}$	V_{BR}	200	-	V
Forward Voltage at $I_F = 2 \text{ A}$	V_F	-	0.72	V
at $I_F = 3 \text{ A}$		-	0.76	
at $I_F = 5 \text{ A}$		-	0.8	
at $I_F = 10 \text{ A}$		-	0.87	
at $I_F = 15 \text{ A}$		-	0.91	
at $I_F = 20 \text{ A}$		-	0.97	
DC Reverse Current at $V_R = 200 \text{ V}$	I_R	-	50	μA

Electrical Characteristics Curves

Fig. 1 Forward Current vs. Forward Voltage

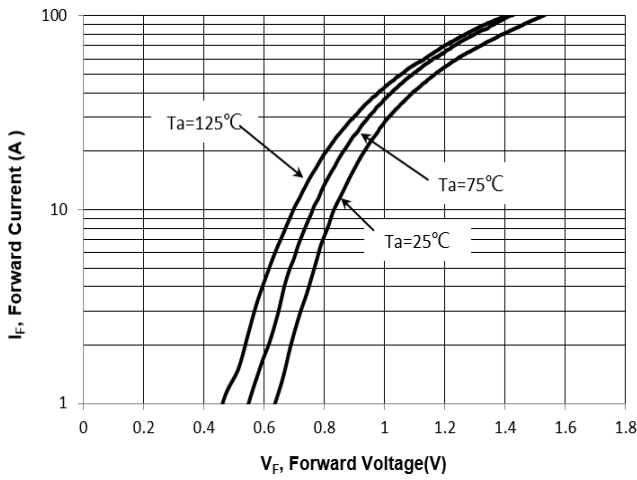


Fig. 2 Reverse Current vs. Reverse Voltage

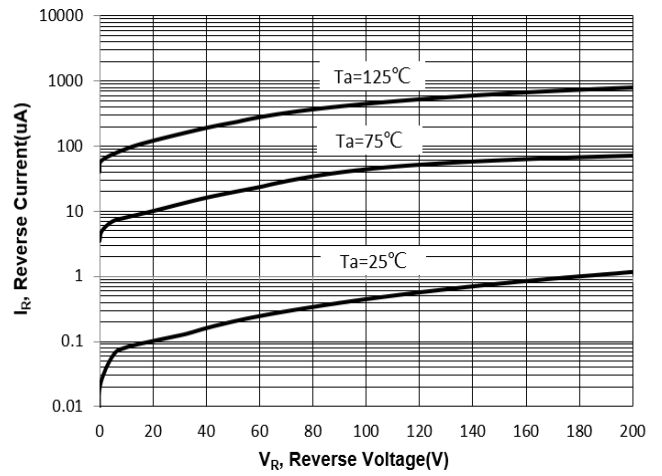


Fig. 3 Junction Capacitance vs. Reverse Voltage

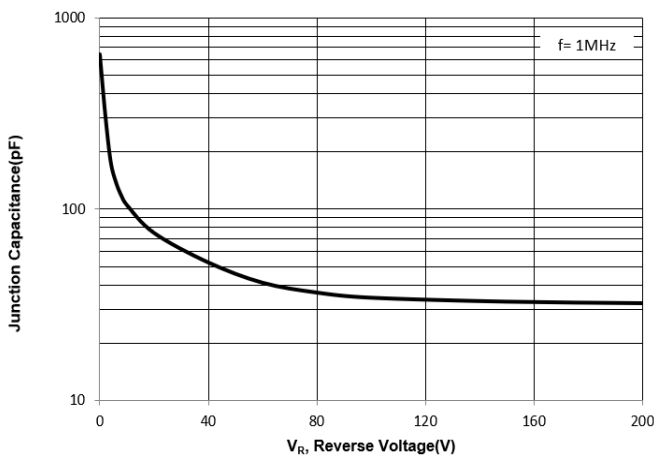
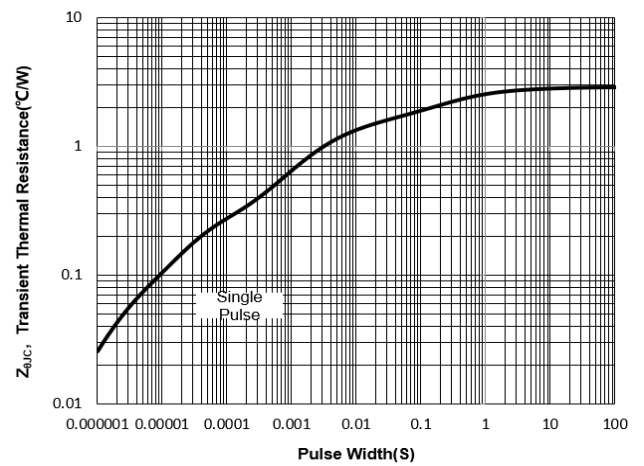
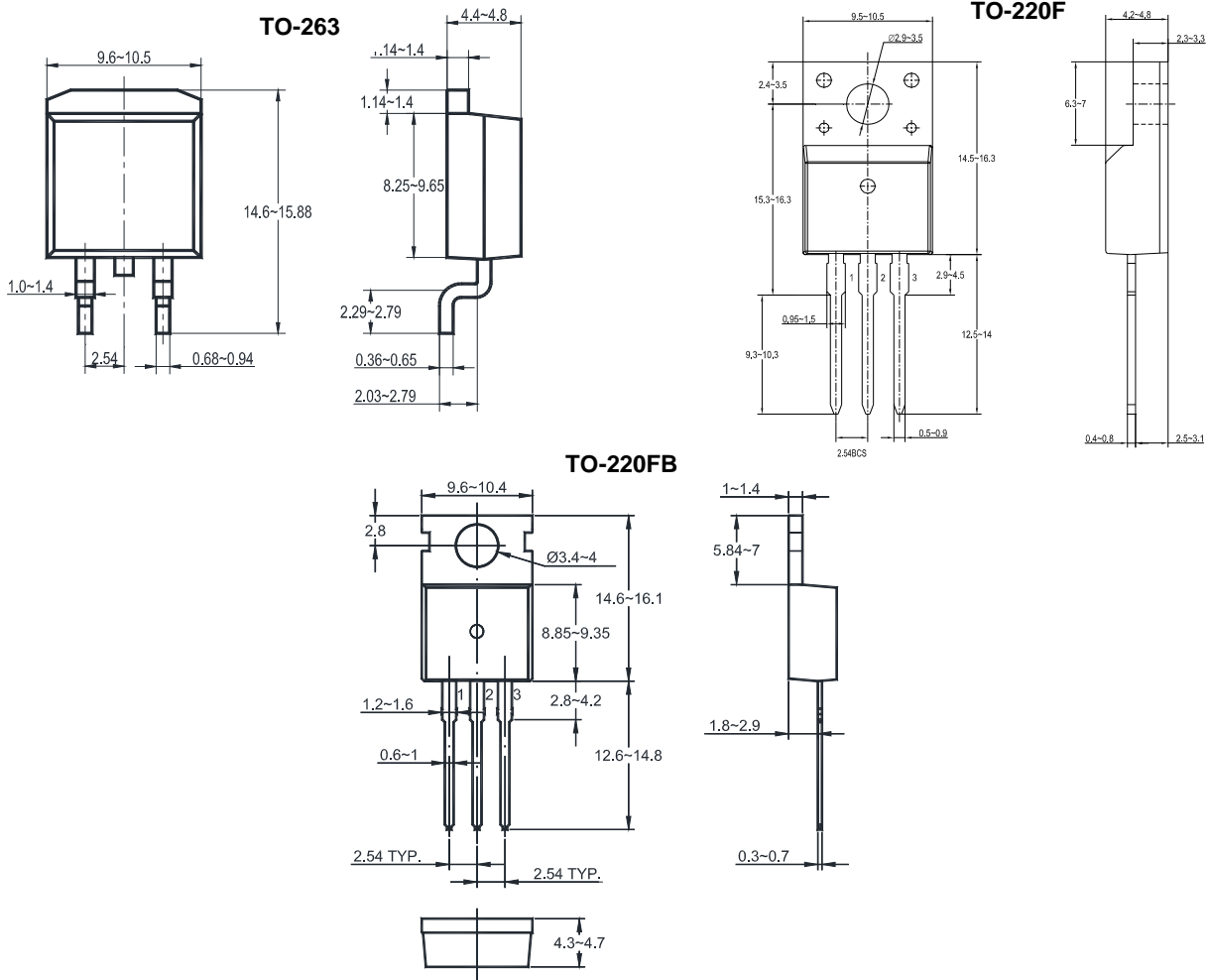


Fig. 4 Thermal Resistance

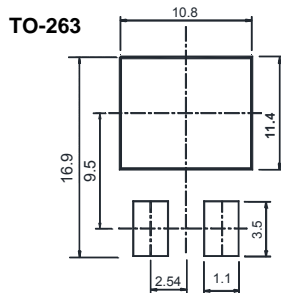


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Package Outline Dimensions (Units: mm)



Recommended Soldering Footprint



Packing information

Package	Type	Carton Quantity	Box Quantity	Base Quantity	Delivery Mode
TO-263	WSV20H200D	5 K / Carton	1 K / Box	50 pcs / Tube	Tube
TO-220F	WSAT20H200D	5 K / Carton	1 K / Box	50 pcs / Tube	Tube
TO-220FB	WSCT20H200D	5 K / Carton	1 K / Box	50 pcs / Tube	Tube

Marking information

"XXXXXXXXXX" = Part No.
 "*****" = Date Code Marking
 Font type: Arial

