

Surface Mounted Trench Schottky Barrier Rectifiers
Reverse Voltage - 150 V
Forward Current - 5 A
FEATURES

- ◆The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆For surface mounted applications
- ◆Built-in strain relief,ideal for automated placement
- ◆Low forward voltage
- ◆High forward surge current capability
- ◆High temperature soldering guaranteed

260 °C/10 seconds at terminals

MECHANICAL DATA

- ◆Case : DO-214AA/SMB
- ◆Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
- ◆Polarity : Polarity symbol marking on body
- ◆Mounting Position : Any

Absolute Maximum Ratings and Electrical characteristics

Ratings at 25°C ambient temperature unless otherwise specified.Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Parameter	Symbols	5S150B	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	150	V
Maximum RMS voltage	V_{RMS}	105	V
Maximum DC Blocking Voltage	V_{DC}	150	V
Maximum Average Forward Rectified Current $T_L=100^{\circ}C$	$I_{F(AV)}$	5.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	I_{FSM}	150	A
Maximum Instantaneous Forward Voltage at 5 A	V_F	0.78	V
Maximum Instantaneous Reverse Current $T_A = 25^{\circ}C$ at Rated DC Reverse Voltage $T_A = 100^{\circ}C$	I_R	1.0 2.0	μA mA
Typical Junction Capacitance	C_j	800	pF
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JA}$	65 16	$^{\circ}C/W$
Operating Junction Temperature Range	T_j	-55 ~ +150	$^{\circ}C$
Storage Temperature Range	T_{stg}	-55 ~ +150	$^{\circ}C$

Note: Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3" x 0. 3" (8.0 mm x 8.0 mm) copper pad areas

Pinning

1.Cathode	2.Anode
	
DO-214AA/SMB	

Marking Code

5S150B	YFW 5S150
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Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

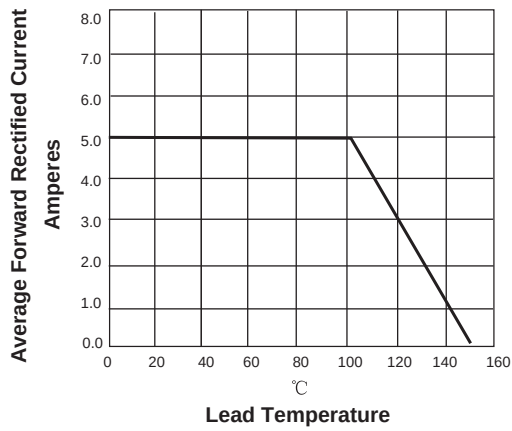


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

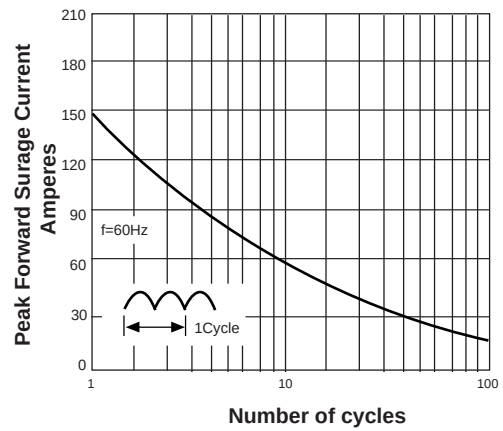


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

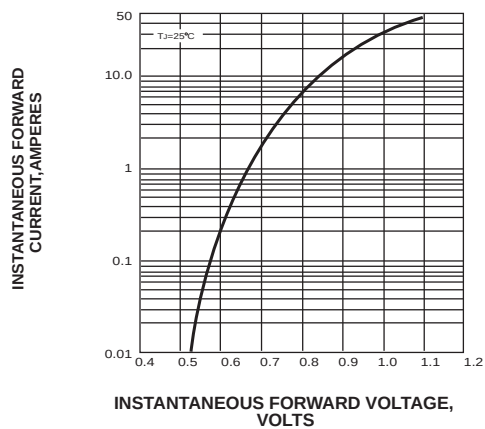
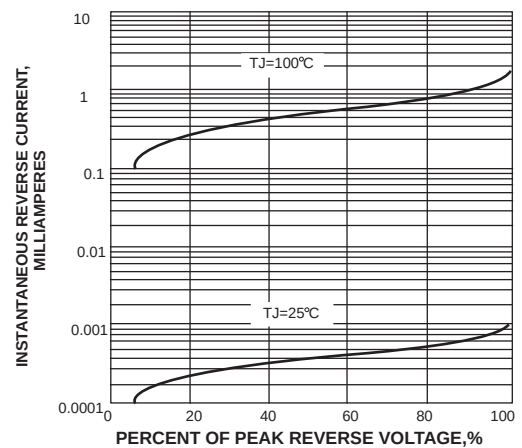
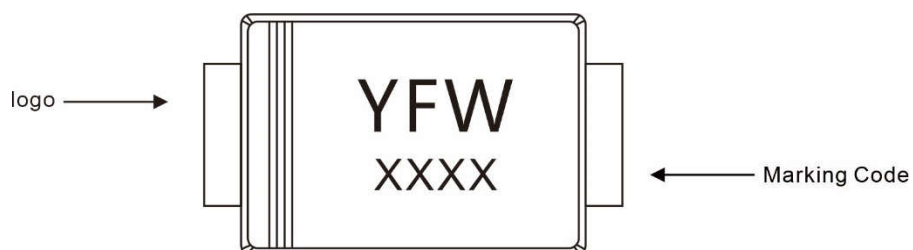


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Marking Diagram



Ordering information

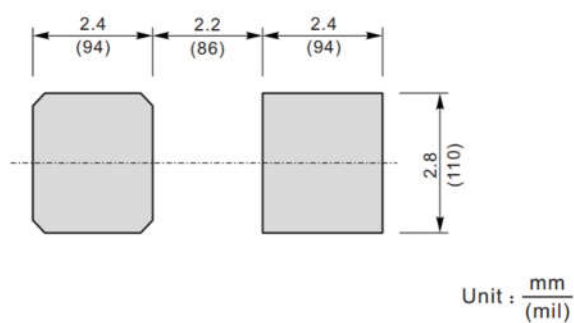
Package	Packing Description	Packing Quantity
DO-214AA SMB	Tape/Reel, 13" reel	3000PCS/Reel 30000PCS/Carton

Package Dimensions

DO-214AA SMB

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	2.13	2.44	84	96
E	4.06	4.70	160	185
D	3.3	3.94	130	155
E ₁	5.08	5.59	200	220
A ₁	0.05	0.20	2.0	7.9
L	0.8	1.5	32	59
C	0.152	0.305	6	12
b	1.9	2.2	75	87

The recommended mounting pad size



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