

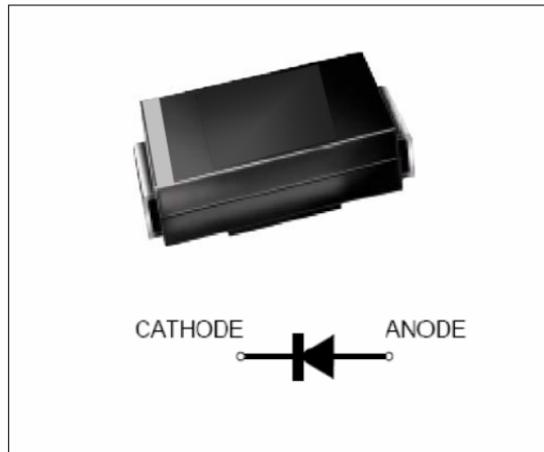
SM1150A

Schottky Barrier Rectifiers

Reverse Voltage 150V Forward Current 1.0A

FEATURES

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Low power loss, high efficiency
- * For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- * Guardring for over voltage protection
- * High temperature soldering guaranteed: 260°C/10 seconds at terminals



Mechanical Data

Case: JEDEC DO-214AC,
molded plastic

Terminals: Plated axial leads, solderable per
MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.0023 oz., 0.065 g

Handling Precaution: None

We declare that the material of product is
Halogen free (green epoxy compound)

1. Electrical Characteristic

Maximum & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	SM1150A	Unit
device marking code		S115	
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 at $T_C = 75^\circ\text{C}$	$I_F(AV)$	1.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30	A
Typical thermal resistance (Note 1)	$R_{θJA}$	150	°C/W
Operating junction and storage temperature range	T_J , T_{STG}	-40 to +150	°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	SM1150A	Unit
Maximum instantaneous forward voltage at 1.0A	V_F	0.85	V
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_J = 100^\circ\text{C}$	I_R	0.5 10.0	mA
Typical junction capacitance at 4.0V, 1MHz	C_J	80	pF

NOTES:

1. 8.0mm² (.013mm thick) land areas

S-SM1150A

2.Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

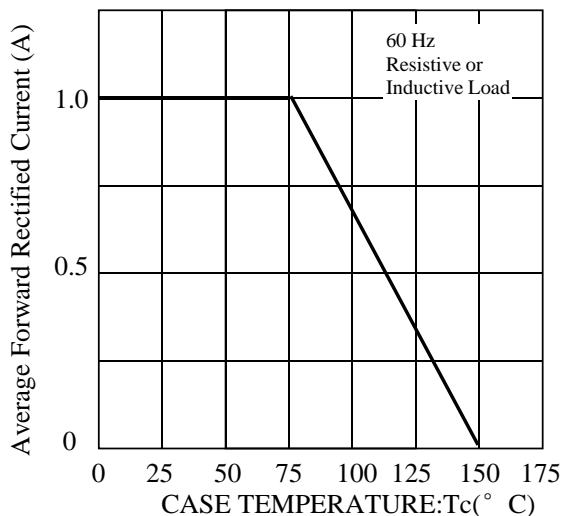


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

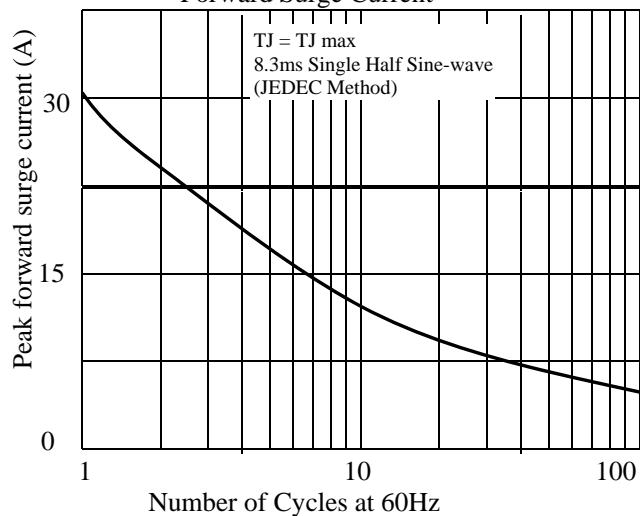


Fig 3. - Typical Instantaneous Forward Characteristics

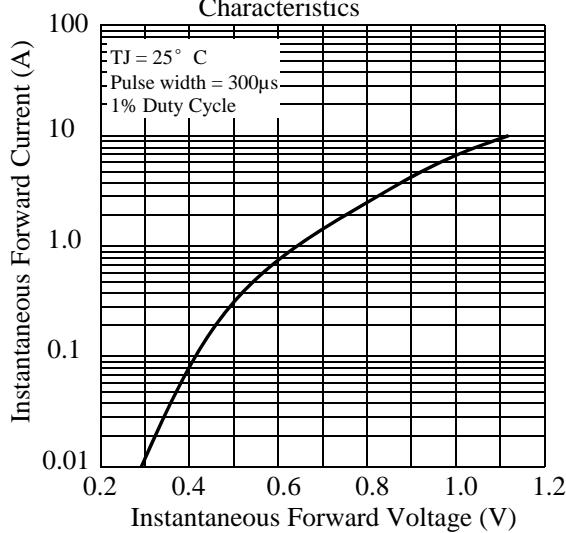


Fig 4. - Typical Reverse Characteristics

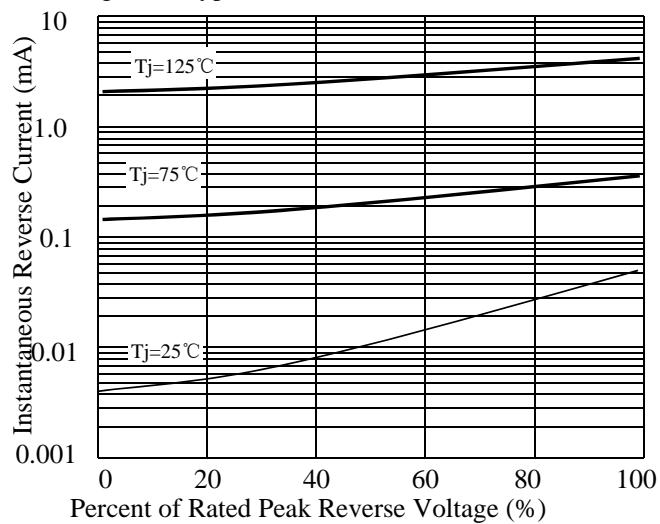


Fig 5. - typical transient thermal impedance

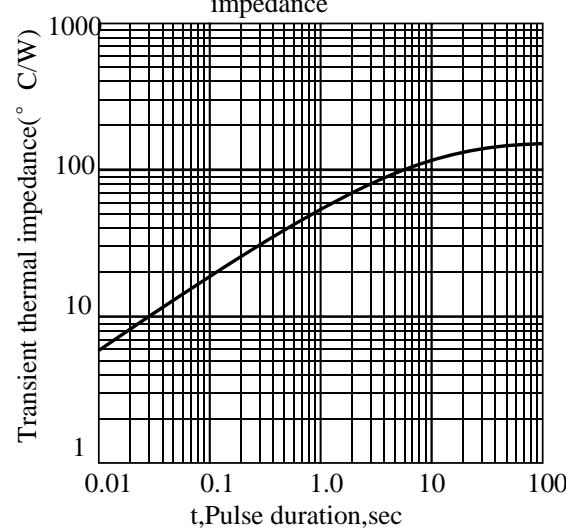
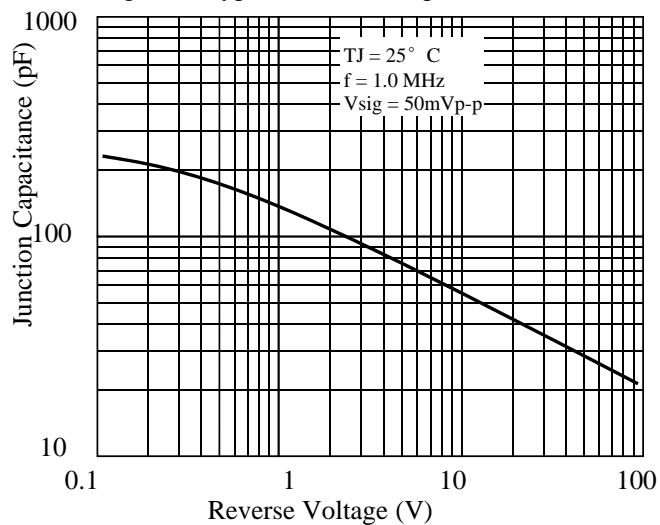


Fig 6. - Typical Junction Capacitance





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3. dimension:

Package outline					
				Dimensions	
	inches		mm		Note: DO-214AC molded plastic case The marking band indicates the cathode
A	Min.	0.086	Max.	0.110	
B	Min.	0.051	Max.	0.067	
C	Min.	0.185	Max.	0.209	
D	Min.	0.067	Max.	0.100	
E	Min.	0.035	Max.	0.059	
F	Min.	0.035	Max.	0.059	



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4. Update Record

版次	更新记录	更新作者	更新日期
1	第一版	谭志伟	2018-9-12