

**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER**

**VOLTAGE 100Volts CURRENT 2.0 Amperes**

**FEATURES**

- \* Low power loss, high efficiency
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability
- \* High speed switching
- \* High surge capability
- \* High reliability
- \* Guard ring construction on dic

**MECHANICAL DATA**

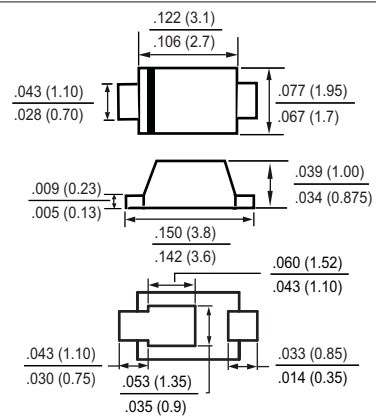
- \* Epoxy: Device has UL flammability classification 94V-0
- \* Mounting position: Any
- \* Weight: 0.01 gram (Approx.)
- \* Flat lead frame

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
resistive or inductive load.



**SOD-123FL**



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)**

RATINGS	SYMBOL	2SS100L	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	Volts
Maximum RMS Voltage	$V_{RMS}$	70	Volts
Maximum DC Blocking Voltage	$V_{DC}$	100	Volts
Maximum Average Forward Rectified Current @ $T_C=75\text{ }^{\circ}\text{C}$	$I_O$	2.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	60	Amps
Current Squared Time	$I^2t$	14.94	$\text{A}^2/\text{Sec}$
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	59	$^{\circ}\text{C}/\text{W}$
	$R_{\theta JL}$	44	
Operating Temperature Range	$T_J$	-55 to + 150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to + 150	$^{\circ}\text{C}$
Total Capacitance (Note 1)	$C_T$	75	pF

**ELECTRICAL CHARACTERISTICS(@TA=25 °C unless otherwise noted)**

CHARACTERISTICS	SYMBOL	2SS100L	UNITS
Maximum Instantaneous Forward Voltage at 2.0A DC	$V_F$	0.85	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	$I_R$	2	$\mu\text{Amps}$
		0.2	mAmps

- NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4 Volts.  
2. " ROHS compliant" .  
3. Thermal Resistance: Mounted on PCB.  
4. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

2022-10  
REV: F

## RATING AND CHARACTERISTICS CURVES ( 2SS100L )

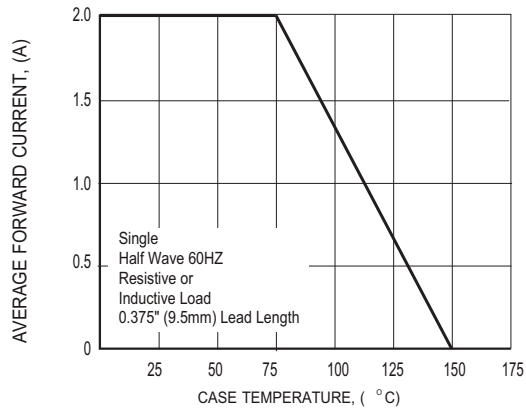


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

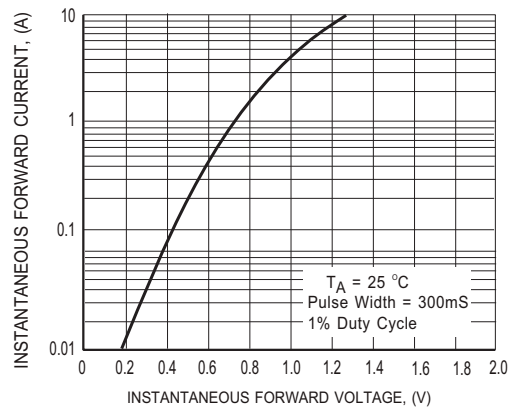


FIG.2 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

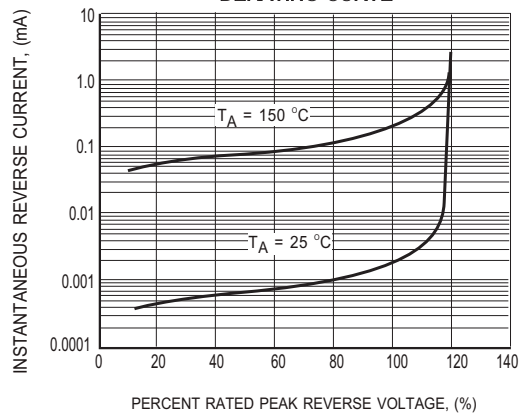


FIG.3 MAXIMUM REVERSE CHARACTERISTICS

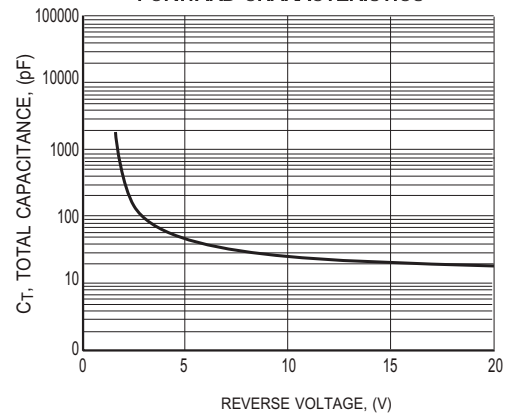


FIG.4 TYPICAL TOTAL CAPACITANCE

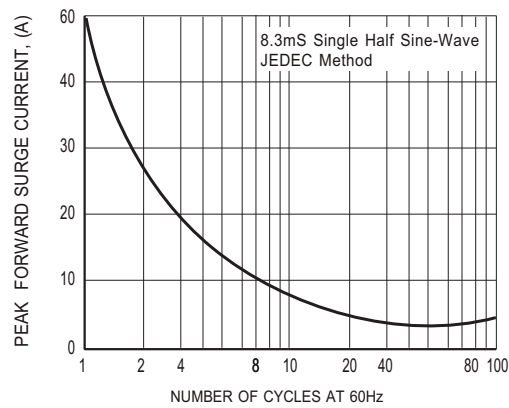
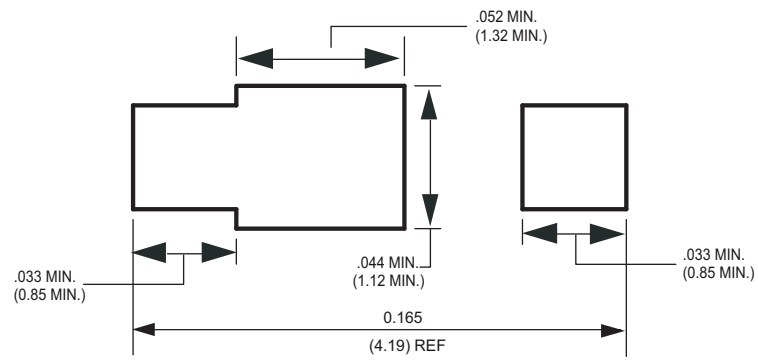


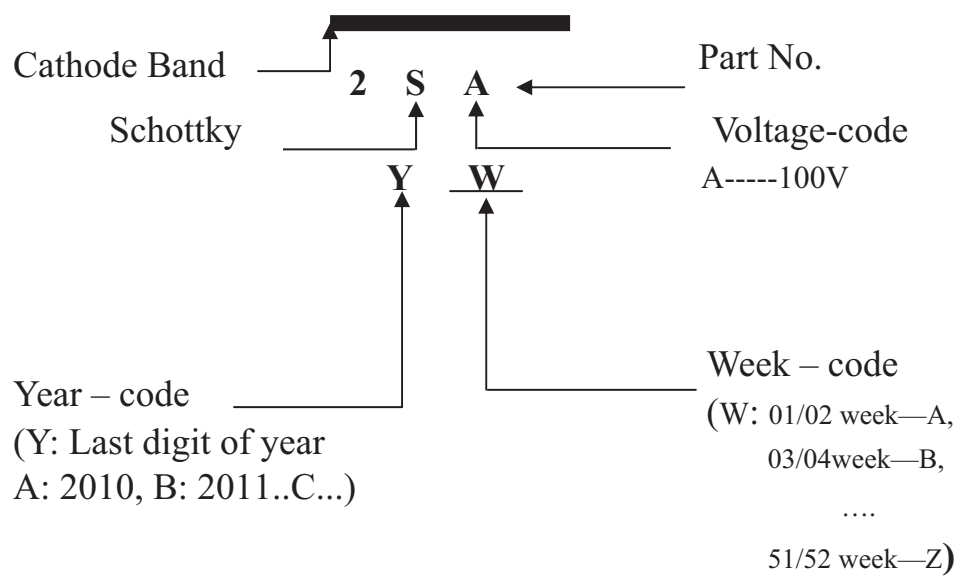
FIG.5 TYPICAL REVERSE CHARACTERISTICS

## Mounting Pad Layout



Dimensions in inches and (millimeters)

## Marking Description



## PACKAGING OF DIODE AND BRIDGE RECTIFIERS

### REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SOD-123F/ SOD-123FL	-W	3,000	15,000	---	---	178	390*205*31	120,000	6.964

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