

LOW Vf SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 40 Volts CURRENT 2.0 Ampere

FEATURES

- * Low power loss, high efficiency
- * Low leakage
- * Low forward voltage
- * High current capability
- * High speed switching
- * High surge capability
- * High reliability

MECHANICAL DATA

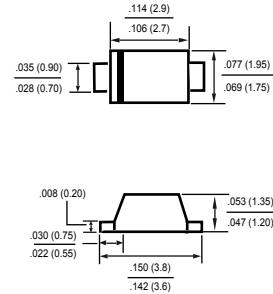
- * Epoxy: Device has UL flammability classification 94V-0
- * Mounting position: Any
- * Weight: 0.016 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



SOD-123F



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	2SSL20	2SSL30	2SSL40	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	Volts
Maximum DC Blocking Voltage	V _{DC}	20	40	40	Volts
Maximum Average Forward Rectified Current .375" (9.5mm) lead length at T _A =75 °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}	25			Amps
Typical Current Square Time	I ² T	2.5			A ² S
Typical Junction Capacitance (Note1)	C _J	110			pF
Typical Thermal Resistance (Note 3)	R _{θJA}	110			°C/W
	R _{θJL}	30			
Operating Temperature Range	T _J	150			°C
Storage Temperature Range	T _{STG}	-55 to + 150			°C

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

CHARACTERISTICS		SYMBOL	2SSL20	2SSL30	2SSL40	UNITS
Maximum Instantaneous Forward Voltage at 2.0A DC		V _F	.42			Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@T _A = 25°C	I _R	1.0			mAmps
	@T _A = 100°C		10			mAmps

- NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".
3. Thermal resistance: Mounted on PCB.

[Http://www.gmsemi.com](http://www.gmsemi.com)

RATING AND CHARACTERISTICS CURVES (2SSL20 THRU 2SSL40)

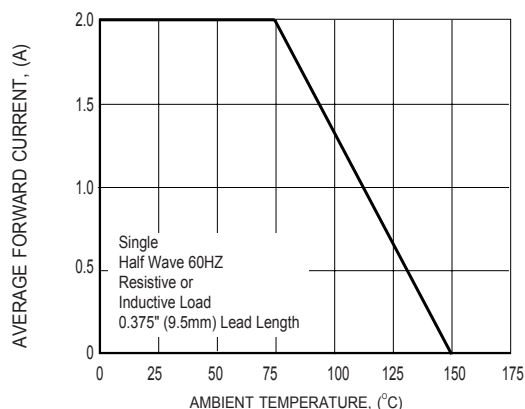


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

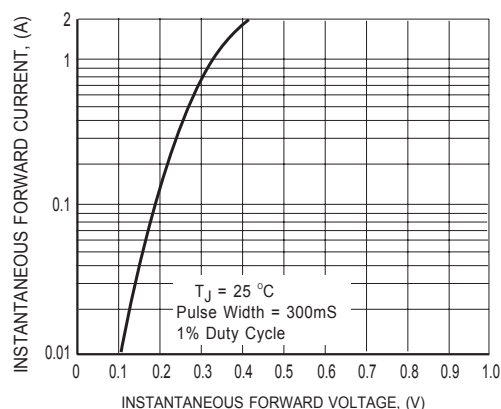


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

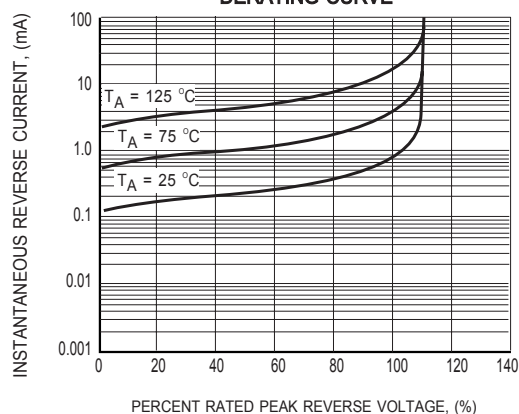


FIG.3 TYPICAL REVERSE CHARACTERISTICS

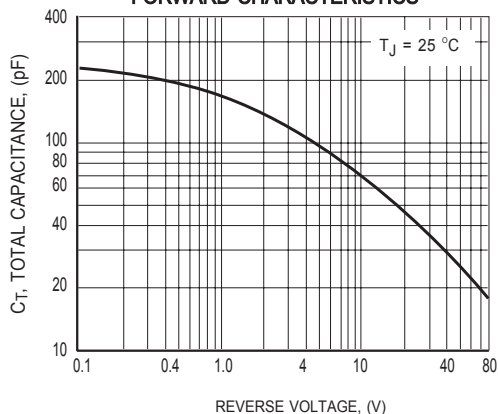


FIG.4 TYPICAL JUNCTION CAPACITANCE

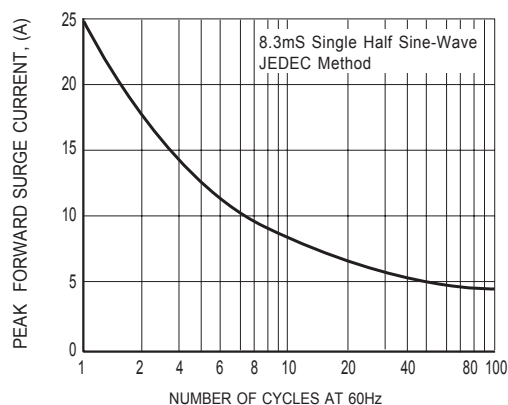


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT