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DSS22 THRU DSS210

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts Forward Current - 2.0 Ampere

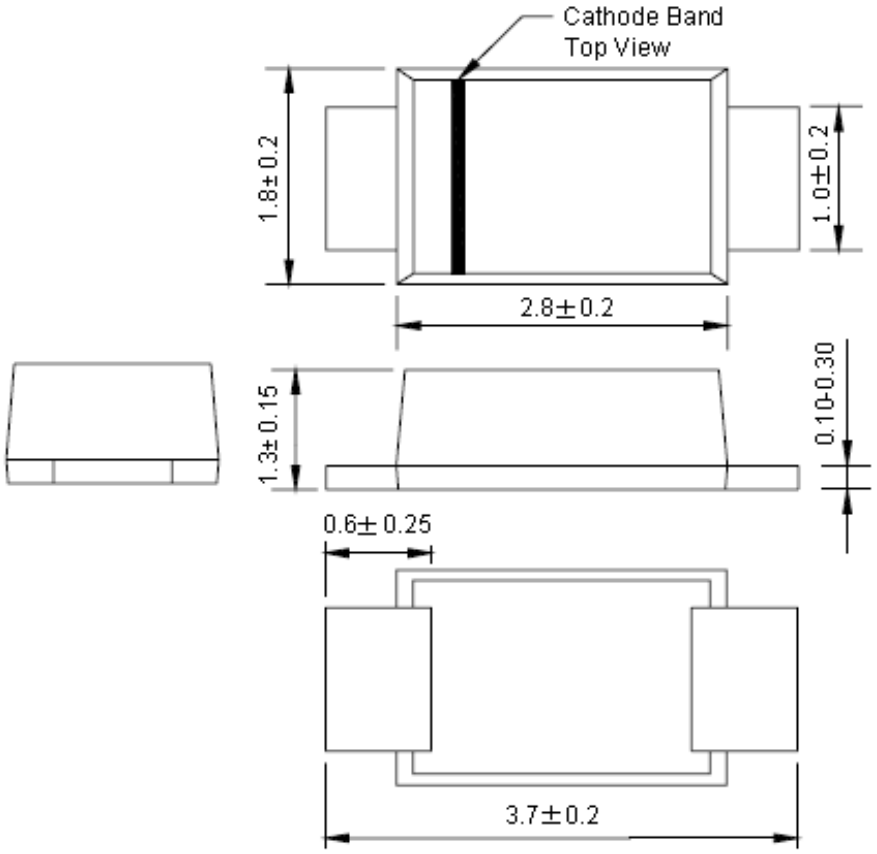
Features

- **The plastic package carries Underwriters Laboratory Flammability Classification 94V-0**
- **Metal silicon junction, majority carrier conduction**
- **Low power loss, high efficiency**
- **High forward surge current capability**
- **High temperature soldering guaranteed: 260 C/10 seconds, 0.375”(9.5mm) lead length, 5 lbs. (2.3kg) tension**

Mechanical Data

- **Case: JEDEC SOD-123FL molded plastic body**
- **Terminals: Solderable per MIL-STD-750, Method 2026**
- **Polarity: Color band denotes cathode end**
- **Mounting Position: Any**
- **Weight: 0.0007 ounce, 0.02 grams**

Mechanical Dimensions (In Inches/mm)



SOD-123FL

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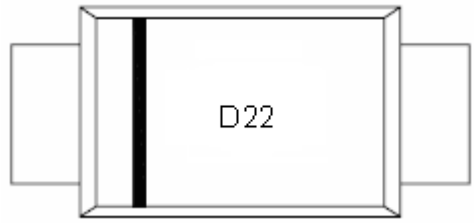
Marking Diagram:



D22 = Marking code

Cautions：Molding resin
Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
DSS22 THRU DSS210	SOD-123FL	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

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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 %

Characteristic	Symbol	DSS 22	DSS 23	DSS 24	DSS 25	DSS 26	DSS 27	DSS 28	DSS 29	DSS 210	Unit
Marking code		D22	D23	D24	D25	D26	D27	D28	D29	D210	
Peak Repetitive Reverse Voltage DC Blocking Voltage	V_{RRM} V_{DC}	20	30	40	50	60	70	80	90	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	49	56	63	70	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0									A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	40.0									A
Max Instantaneous Forward Voltage at 2A	V_F	0.55			0.70		0.85				V
Peak Reverse Current @T_A = 25°C	I_{RM}	0.5									mA
At Rated DC Blocking Voltage @T_A = 100°C		10.0					5.0				
Typical Junction Capacitance(Note 1)	C_J	220			180						pF
Typical Thermal Resistance Junction to Ambient (Note 2)	$R_{\theta JA}$	180									°C/W
Operating Temperature Range	T_J	-55 to +125					-55 to +150				°C
Storage Temperature Range	T_{STG}	-55 to +150									

Note: 1. Measured at 1MHz and applied reverse voltage of 4V D.C
2. PCB mounted on 0.2 X 0.2" (5.0 X 5.0 mm) copper pad areas.

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FIG. 1- FORWARD CURRENT DERATING CURVE

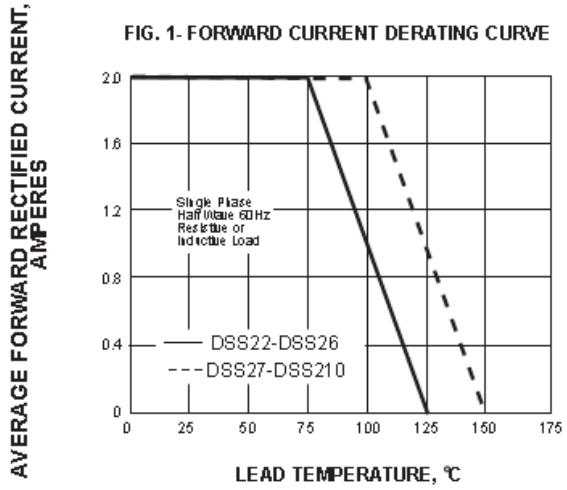


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

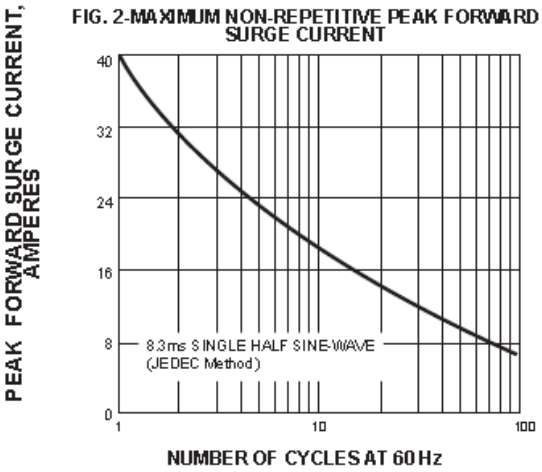


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

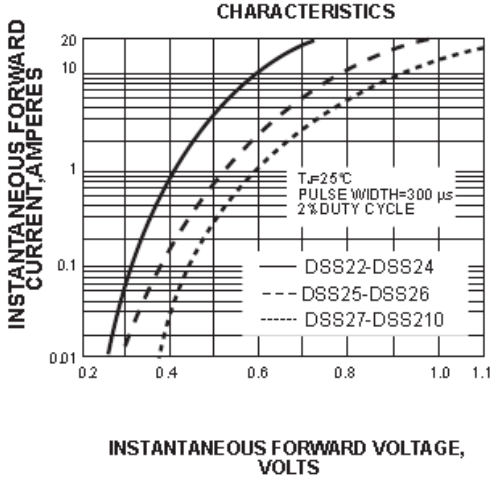


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

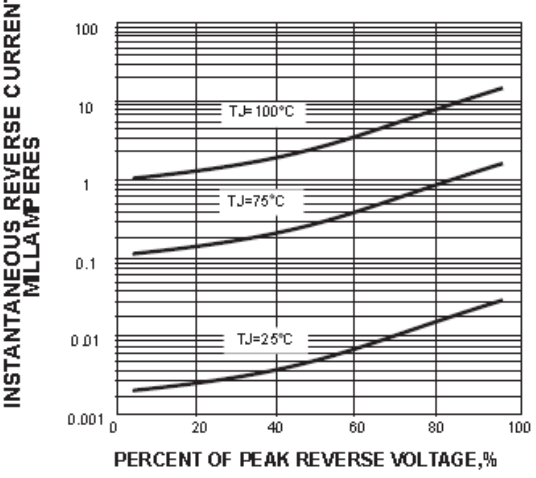
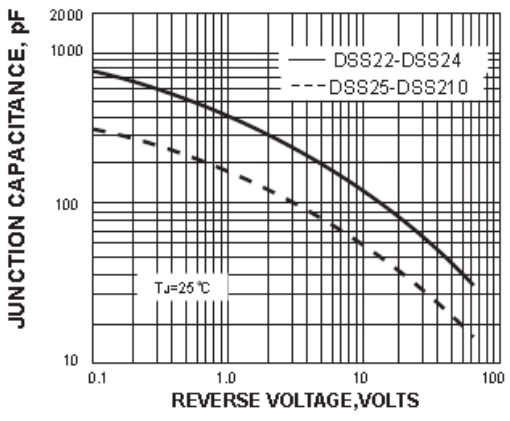


FIG. 5-TYPICAL JUNCTION CAPACITANCE



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