

FEATURES

- Glass passivated device
- Ideal for surface mouted applications
- Low reverse leakage
- Metallurgically bonded construction
- High temperature soldering guaranteed:
260°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA

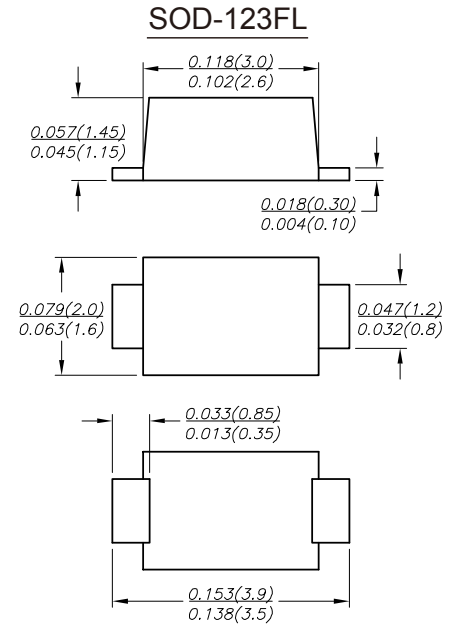
Case: SOD-123FL molded plastic body over passivated chip

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

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.0007 ounce, 0.02 grams



Dimensions in inches and (millimeters)

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 current derate by 20%.

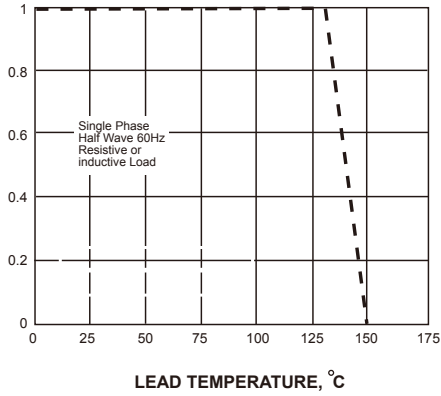
	SYMBOLS	DSS12	DSS13	DSS14	DSS15	DSS16	DSS17	DSS18	DSS19	DSS110	UNITS	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	70	80	90	100	V	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	49	56	63	70	V	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	70	80	90	100	V	
Maximum average forward rectified current	$I_{(AV)}$	1.0									A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	25.0									A	
Maximum instantaneous forward voltage at 1.0A	V_F	0.55			0.70			0.85			V	
Maximum DC reverse current at rated DC blocking voltage	I_R	0.5			0.1			5.0			mA	
		10.0										
Typical junction capacitance	C_J	110			80						pF	
Typical thermal resistance	$R_{\theta JA}$	95										°C/W
Operating junction temperature range	T_J	-55 to +150									°C	
Storage temperature range	T_{STG}	-55 to +150									°C	

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.



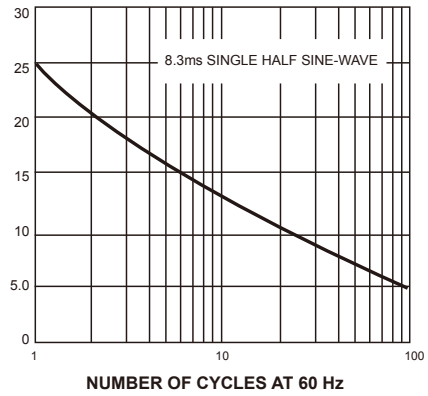
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



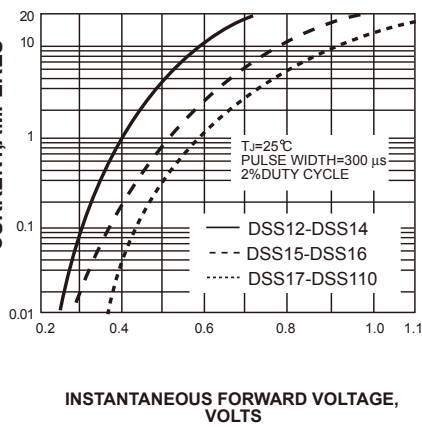
PEAK FORWARD SURGE CURRENT, AMPERES

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



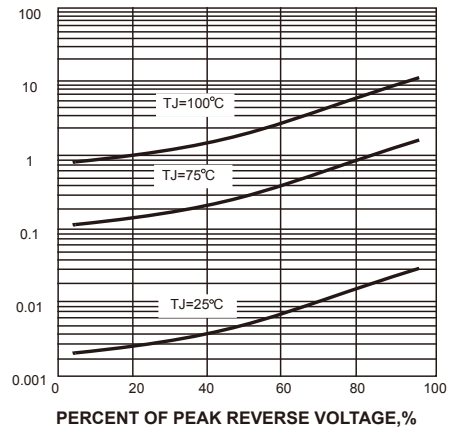
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE

