

FEATURES

- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Built-in strain relief, ideal for automated placement
- Low power loss, high efficiency.
- High forward surge current capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0



SOD-123FL

MECHANICAL DATA

- Case: SOD-123FL Molded plastic
- Terminals: Pure tin plated, lead free
- Polarity: Indicated by cathode band
- Weight: 11.5 mg (approx.)



Cathode

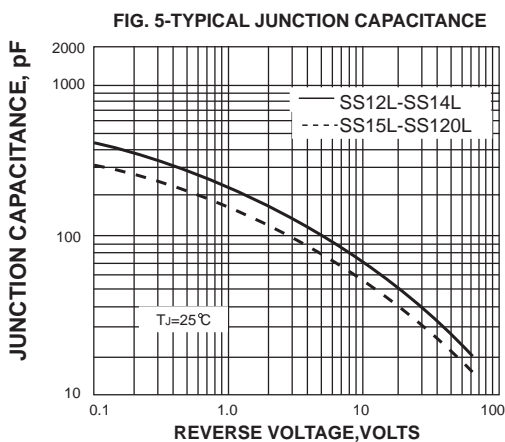
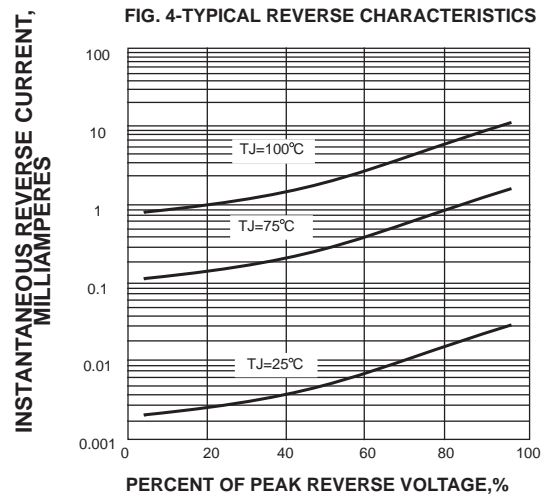
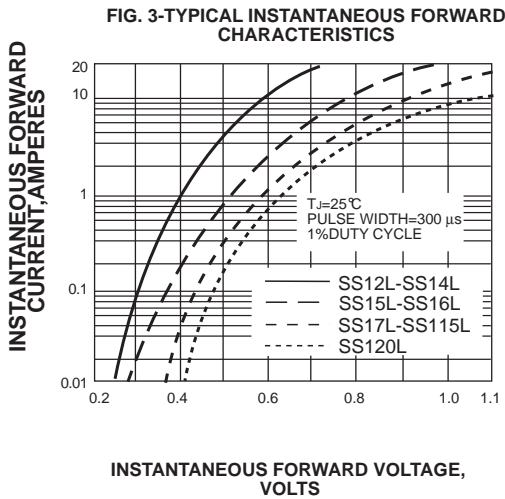
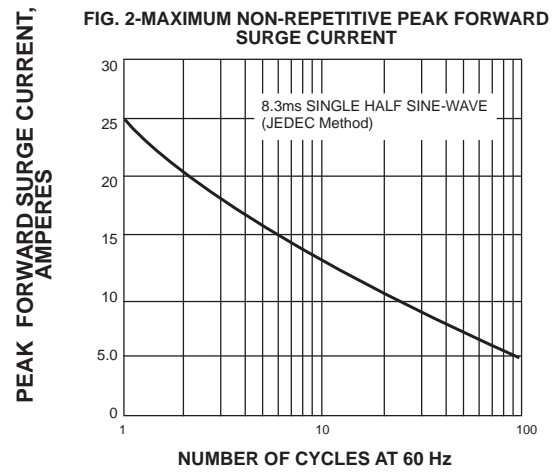
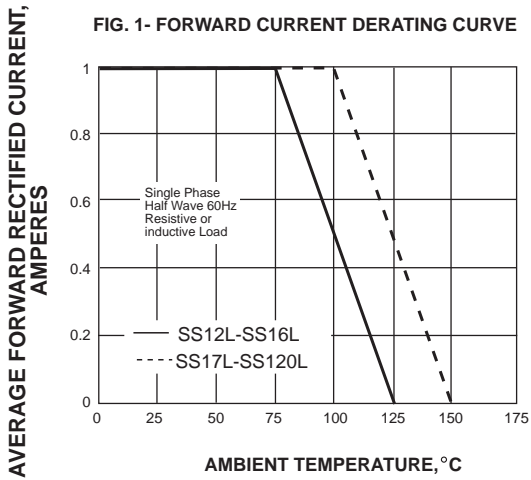
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

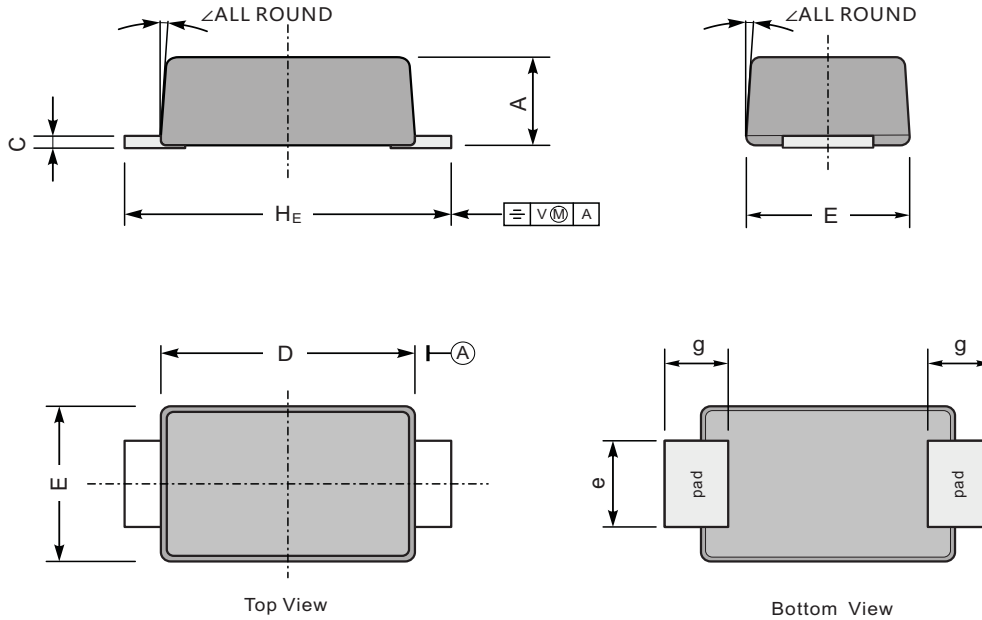
Parameter	Symbol	SS 12L	SS 13L	SS 14L	SS 15L	SS 16L	SS 18L	SS 110L	SS 115 L	SS 120L	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.0									A
Peak Forward Surge Current 8.3 ms Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30.0									A
Maximum Instantaneous Forward Voltage at 1A	V_F	0.45	0.55	0.70		0.85		0.95		V	
Maximum DC Reverse Current Cat Rated DC Blocking Voltage	I_R	0.5							0.2		mA
		10.0					5.0		2.0		mA
Typical Junction Capacitance(Note1)	C_j	110			90						pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	88									°C/w
Operating Temperature Range	T_J	-50 to +150									°C
Storage Temperature Range	T_{STG}	-50 to +150									°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

Typical Characteristics



SOD-123FL Package Outline Dimensions



UNIT		A	C	D	E	e	g	H _E	\angle
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	