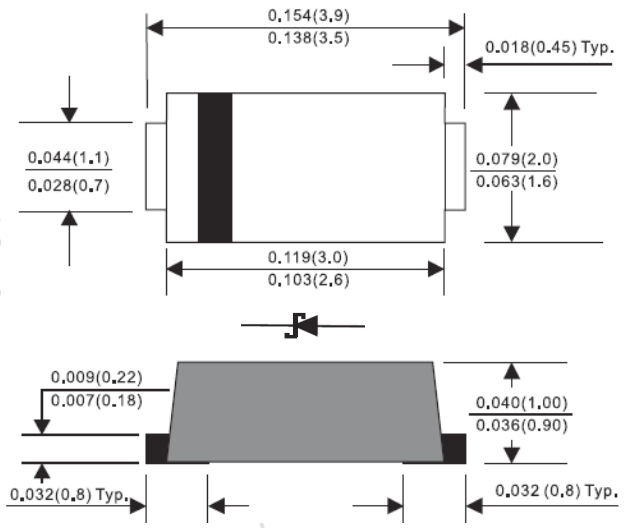
1A SMD LOW V_F SCHOTTKY BARRIER RECTIFIERS, 20V-40V



PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION 94V-0
2. EXCELLENT REVERSE LEAKAGE CURRENT AND THERMAL RESISTANCE
3. HIGH CURRENT CAPABILITY, LOW POWER LOSS
4. SILICON EPITAXIAL PLANAR CHIP, METAL SILICON JUNCTION
5. GUARDRING FOR OVERVOLTAGE PROTECTION
6. CASE: TRANSFER MOLDED, SOD-123S (MINI SMA)
7. DIMENSIONS IN INCHES AND (MILLIMETERS)
8. LEADS: SOLDERABILITY PER MIL-STD-750 METHOD 2026
9. WEIGHT: 0.0155 GRAMS
10. RoHS COMPLIANT, ADD SUFFIX “H” FOR HALOGEN FREE i.e. SL12-MS-H: RoHS COMPLIANT/HALOGEN FREE

ELECTRICAL CHARACTERISTICS

MAXIMUM RATINGS (T_A =25°C UNLESS OTHERWISE NOTED) AND ELECTRICAL CHARACTERISTICS

RATING	SYMBOL		UNITS
MAXIMUM FORWARD RECTIFIED CURRENT	I_O	1	A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	30	A
TYPICAL JUNCTION CAPACITANCE BETWEEN TERMINALS (NOTE 1)	C_J	130	pF
STORAGE TEMPERATURE RANGE	T_{STG}	- 65 TO +175	°C
OPERATING JUNCTION TEMPERATURE RANGE	T_J	- 55 TO +100	°C
MAX. DC REVERSE CURRENT AT RATED DC BLOCKING VOLTAGE T_J= 25°C	I_R	1	mA
MAX. DC REVERSE CURRENT AT RATED DC BLOCKING VOLTAGE T_J= 75°C	I_R	20	mA
TYPICAL THERMAL RESISTANCE	$R_{\theta JA}$	53	°C/W
	$R_{\theta JC}$	35	°C/W

PART NUMBER	MAX RECURRENT PK REVERSE VOLTAGE/DC BLOCKING V_{RRM}/V_R (V)	MAX V_{RMS} (V)	TYPICAL FORWARD VOLTAGE AT I_F = 1A V_F (V)	MARKING
SL12-MS	20	14	0.38	L2
SL14-MS	40	28	0.40	L4

NOTE : 1. MEASURE AT 1MHz WITH 4VDC REVERSE VOLTAGE APPLIED .
2. CURRENT RATING IS BASED ON SINGLE PHASE, 1/2 WAVE, 60HZ, RESISTIVE, OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CHARACTERISTICS

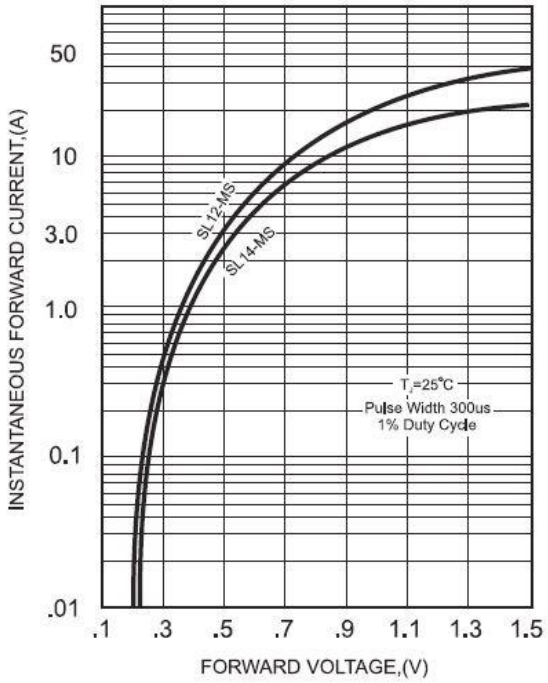


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

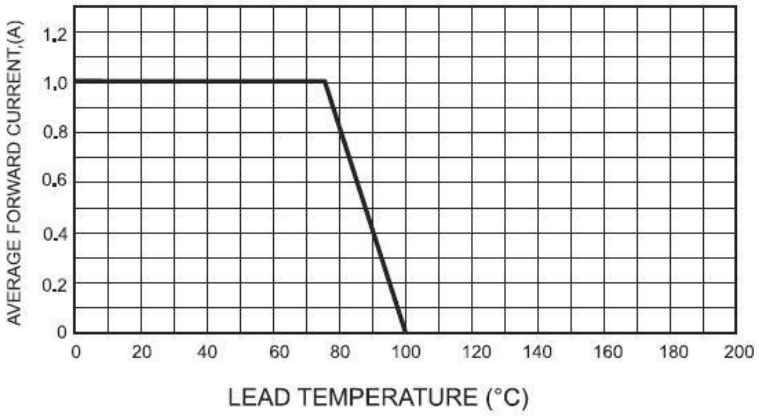


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

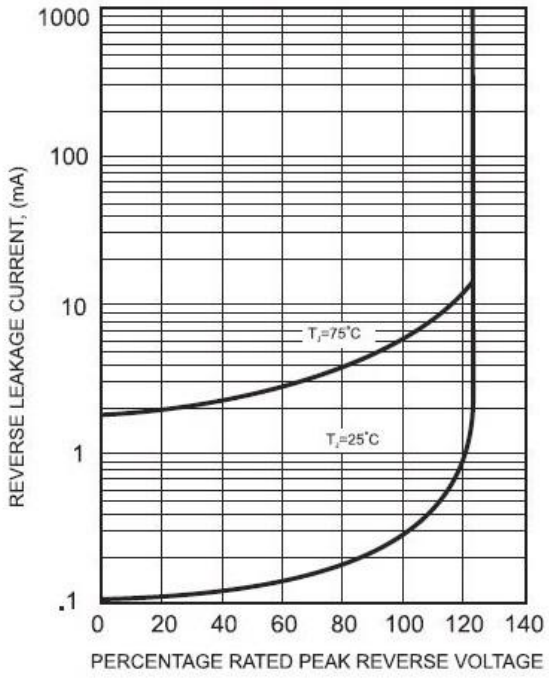


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

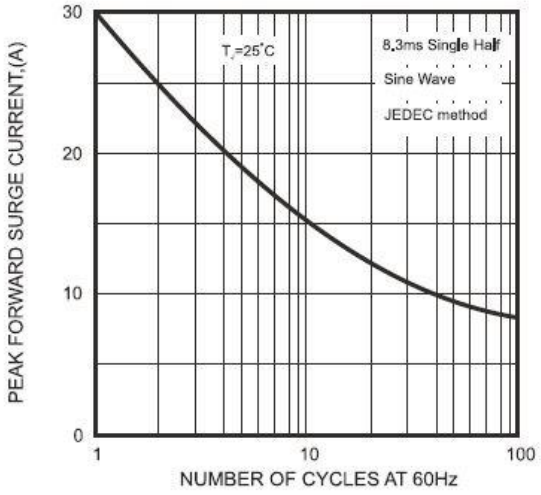
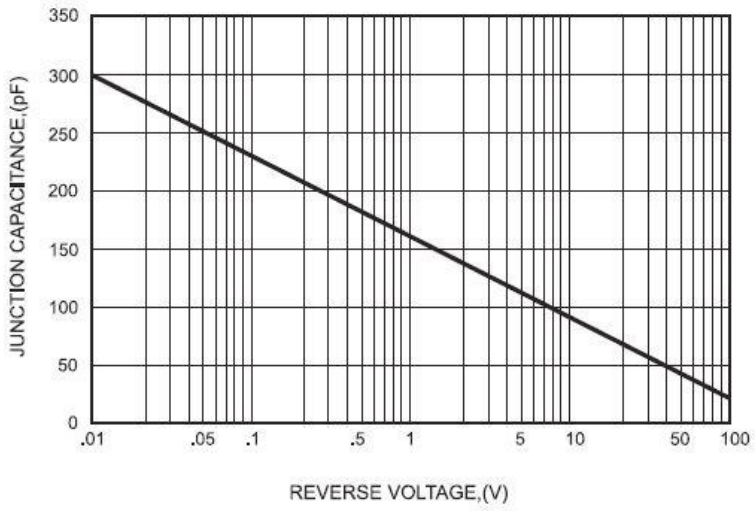
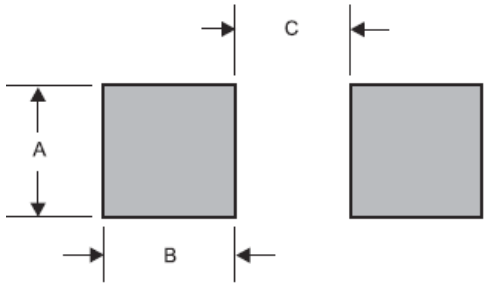


FIG.5-TYPICAL JUNCTION CAPACITANCE



LAYOUT RECOMMENDATION



PACKAGE	A	B	C
SOD-123S	0.044 (1.10)	0.040 (1.00)	0.079 (2.00)