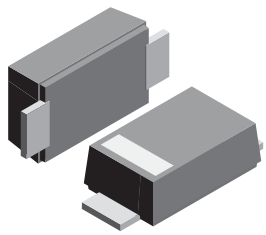
DSS12 - DSS120

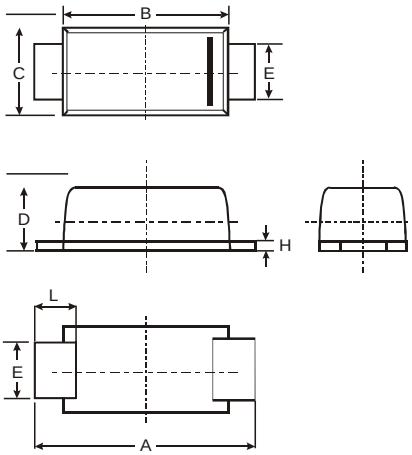
SURFACE MOUNT SCHOTTKY BARRIER DIODES

VOLTAGE RANGE: 20 - 200V
CURRENT: 1.0 A



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: 250°C/10 seconds,0.375(9.5mm) lead length, 5 lbs. (2.3kg) tension



SOD-123FL			
Dim	Min	Max	Typ
A	3.50	3.80	3.65
B	2.60	2.90	2.75
C	1.70	1.90	1.80
D	0.09	1.10	1.00
E	0.08	1.10	0.095
H	0.12	0.20	0.16
L	0.07	0.09	0.08
All Dimensions in mm			

Mechanical Data

- Case: JEDEC SOD-123FL molded plastic body over passivated junction
- 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

RoHS COMPLIANT

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	DSS12	DSS13	DSS14	DSS15	DSS16	DSS17	DSS18	DSS19	DSS110	DSS115	DSS120	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	70	80	90	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	49	56	63	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	70	80	90	100	150	200	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 (JEDEC Method)	I_{FSM}	25.0											A
Maximum instantaneous forward voltage at 1.0A	V_F	0.55			0.70		0.85					0.95	V
Maximum DC reverse current T_A=25℃	I_R	0.5									0.2		mA
at rated DC blocking voltage T_A=100℃		10.0					5.0				2.0		
Typical junction capacitance (NOTE 1)	C_J	110			80								pF
Operating junction temperature range	T_J	-65 to +125					-65 to +150						°C
Storage temperature range	T_{STG}	-65 to +150											°C

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

RATINGS AND CHARACTERISTIC CURVES DSS12 THRU DSS120

FIG. 1- FORWARD CURRENT DERATING CURVE

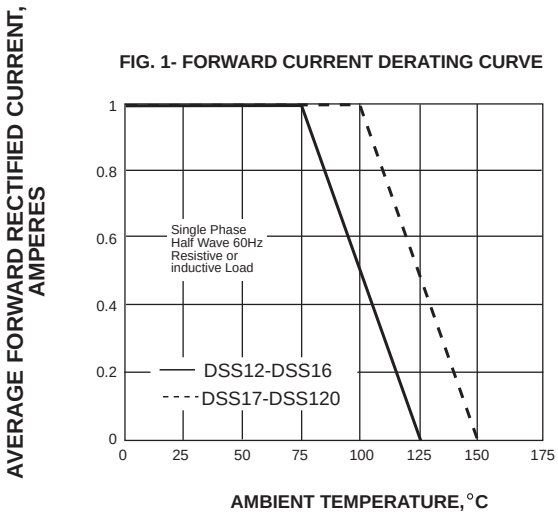


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

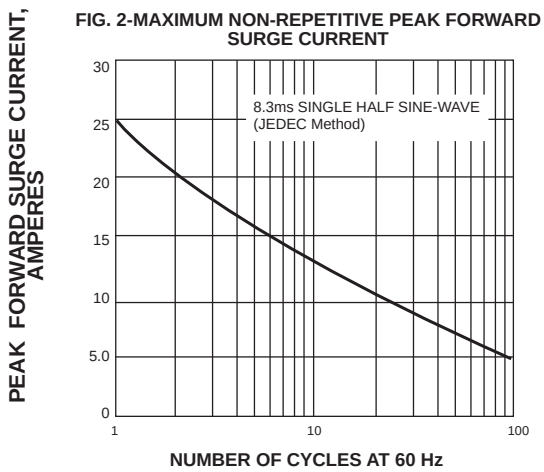


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

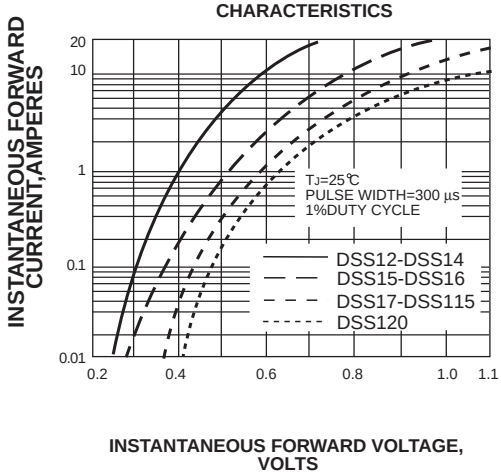


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

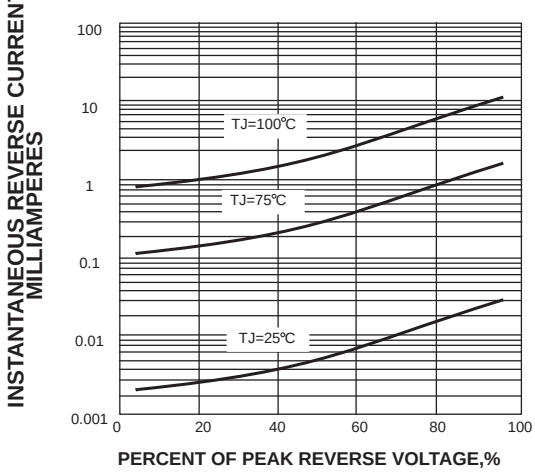


FIG. 5-TYPICAL JUNCTION CAPACITANCE