



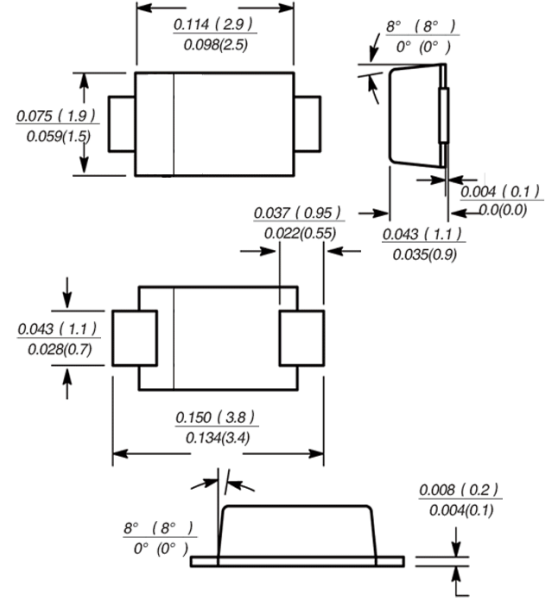
DSS12-DSS120

1.0A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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



Dimensions in millimetre

Mechanical Data

- Terminal: : solderable per MIL-STD-750, Method 2026
- Case: : JEDEC SOD-123FL molded plastic body
- Polarity: : Color band denotes cathode end
- Mounting Position: Any

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

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

Parameter	Symbol	DSS12 D12	DSS13 D13	DSS14 D14	DSS15 D15	DSS16 D16	DSS17 D17	DSS18 D18	DSS19 D19	DSS110 D110	DSS115 D115	DSS120 D120	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 output rectified current	$I(AV)$	1.0											A	
Peak forward surge current 8.3ms single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25											A	
Maximum instantaneous forward voltage @1.0A	V_F	0.6		0.7		0.85				0.95		V		
Maximum DC reverse current at TA=25°C rated DC blocking voltage per leg TA=100°C	I_R	0.5									0.2		mA	
		10			5			2						
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.



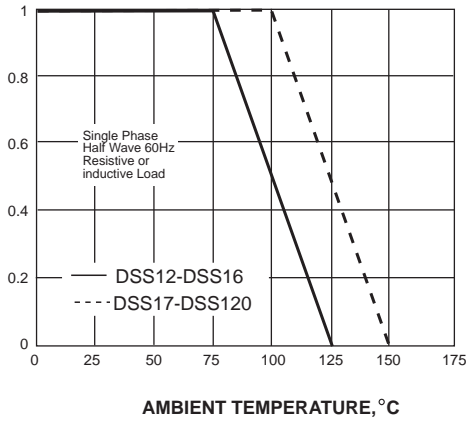
DSS12-DSS120



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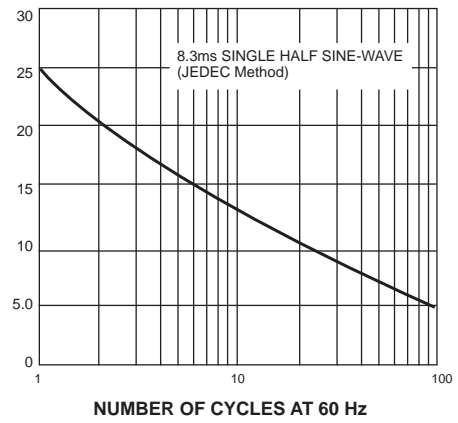
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



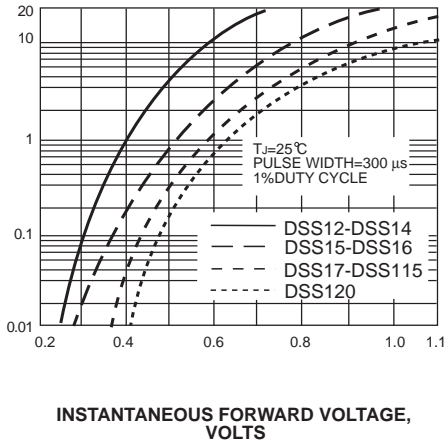
PEAK FORWARD SURGE CURRENT, AMPERES

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



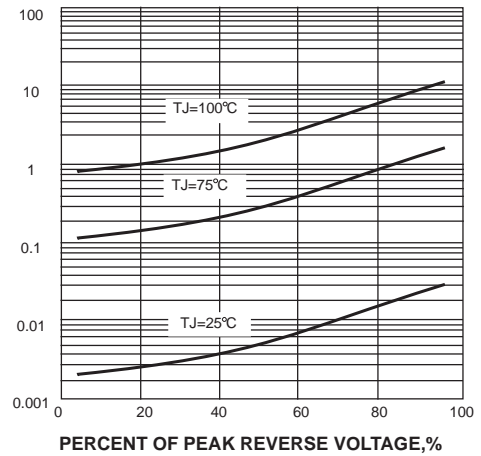
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE

