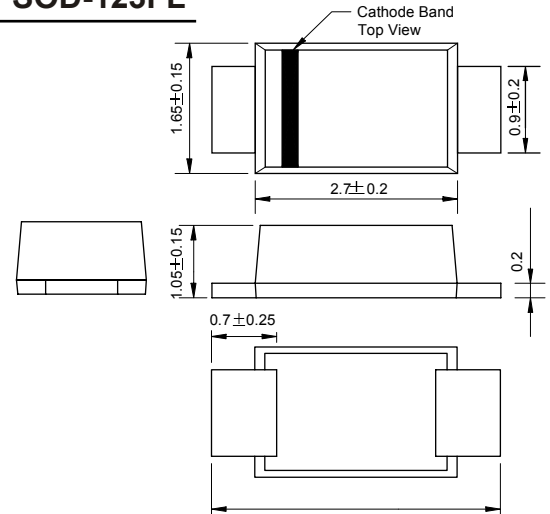


MBR120 THRU MBR1100

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 inches and (millimeters)

MECHANICAL DATA

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

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	MBS 120-FL	MBS 130-FL	MBS 140-FL	MBS 150-FL	MBS 160-FL	MBS 170-FL	MBS 180-FL	MBS 190-FL	MBS 1100-FL	UNITS	
	Marking	D12	D13	D14	D15	D16	D17	D18	D19	D110		
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	70	80	90	100	VOLTS	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	49	56	63	70	VOLTS	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	70	80	90	100	VOLTS	
Maximum average forward rectified current	$I_{(AV)}$	1.0									Amp	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25.0									Amps	
Maximum instantaneous forward voltage at 1.0A	V_F	0.55			0.70			0.85			Volts	
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	0.5						5.0			mA	
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.