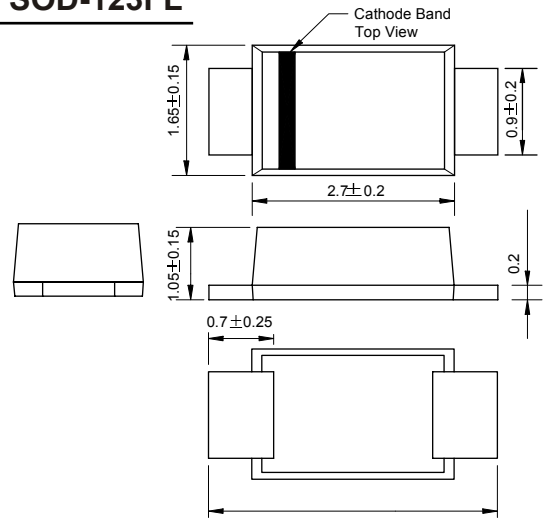
星合电子
XINGHE ELECTRONICS

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℃/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℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

	SYMBOLS	MBRS 120-FL	MBRS 130-FL	MBRS 140-FL	MBRS 150-FL	MBRS 160-FL	MBRS 170-FL	MBRS 180-FL	MBRS 190-FL	MBRS 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℃	I_R	0.5									mA
at rated DC blocking voltage T_A=100℃		10.0					5.0				
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.

FIG. 1- FORWARD CURRENT DERATING CURVE

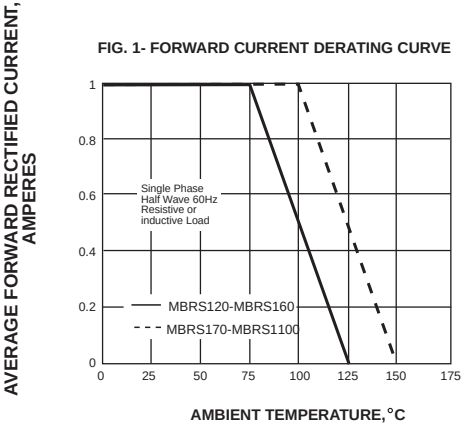


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

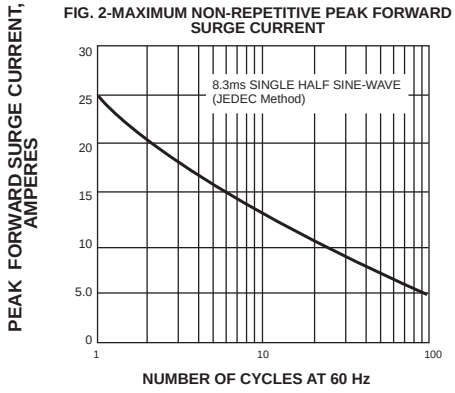


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

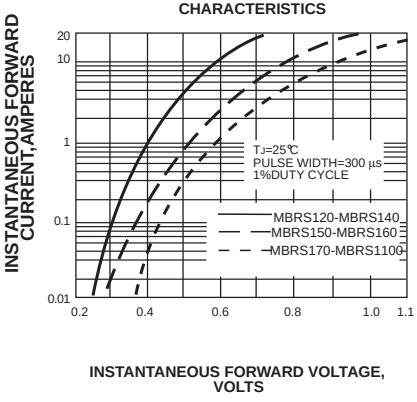


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

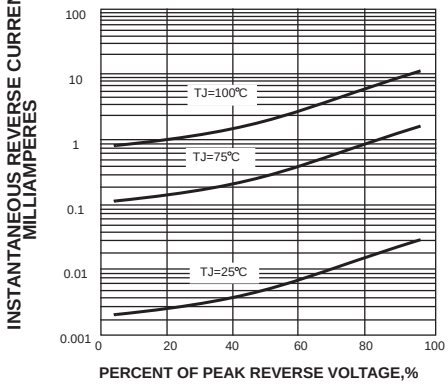


FIG. 5-TYPICAL JUNCTION CAPACITANCE

