



YEA SHIN TECHNOLOGY CO., LTD

MBR220S THRU MBR2100S

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE- 20 to 100 Volts CURRENT- 2.0 Amperes



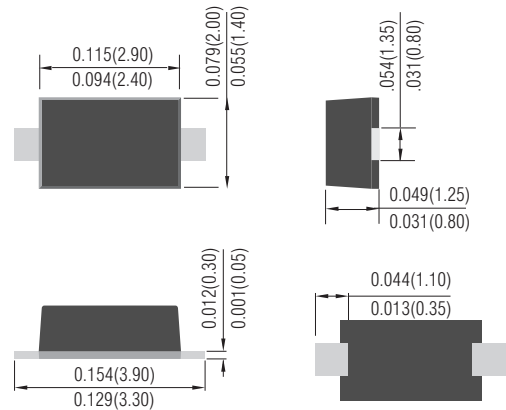
SOD-123S Unit:inch(mm)

Features

Plastic package has Underwriters Laboratory
Flammability Classification 94V-0 Utilizing Flame
Retardant Epoxy Molding Compound.
For surface mounted applications.
Exceeds environmental standards of MIL-S-19500 / 228
Low leakage current.

Mechanical data

Case : Molded plastic, SOD-123S / MINI SMA
Terminals : Solder plated, solderable per MIL-STD-750,
Method 2026
Polarity : Indicated by cathode band
Mounting Position : Any



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

*Single phase, half wave, 60 Hz, resistive or inductive load.

**All values except Maximum RMS Voltage are registered JEDEC parameters.

	Symbol	Condition	MBR220S	MBR230S	MBR240S	MBR260S	MBR2100S	UNIT
Marking Code			M2	M3	M4	M6	MA	
Maximum Recurrent Peak Reverse Voltage	VRRM		20	30	40	60	100	V
Maximum RMS Voltage	VRMS		14	21	28	42	70	V
Continuous reverse voltage	VR	0.2 mA, 10mS	20	30	40	60	100	V
Forward rectified current	IF		2.0					A
Maximum forward voltage	VF	IF = 2A	0.5			0.7	0.85	V
Forward surge current	IFSM	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	50 (Max)					A
Reverse current	IR	VR = VRRM, TA = 25°C	0.1 (Max)					mA
		VR = VRRM, TA = 125°C	10 (Max)					mA
Thermal resistance	Rθ JA	Junction to ambient	85 (typ.)					°C/W
Diode junction capacitance	CJ	f=1MHz and applied 4vDC reverse voltage	160 (typ.)					PF
Storage temperature	TSTG		-55 to +150					°C
Operating temperature	TJ		-55 to +125			-55 to +150		°C

DEVICE CHARACTERISTICS

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FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

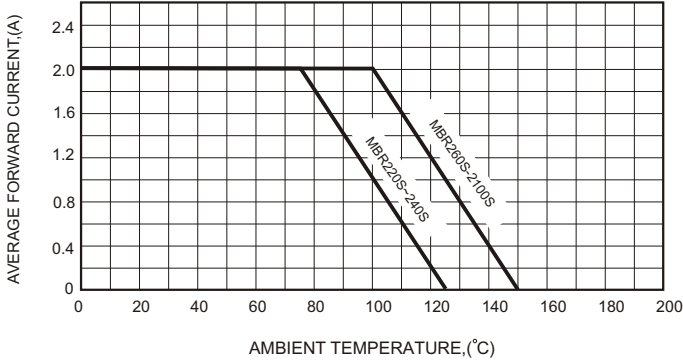


FIG.2-TYPICAL FORWARD CHARACTERISTICS

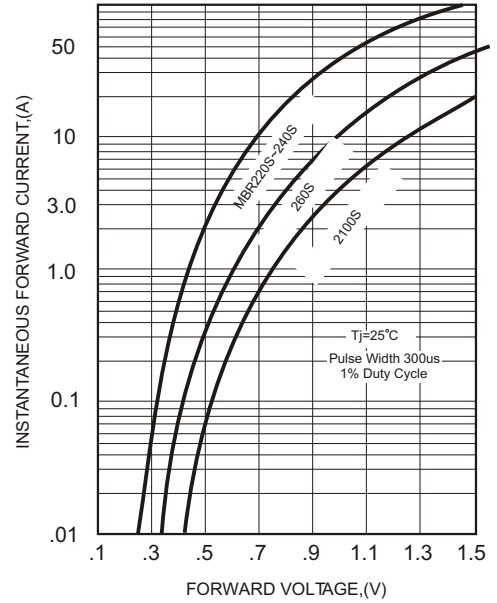


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

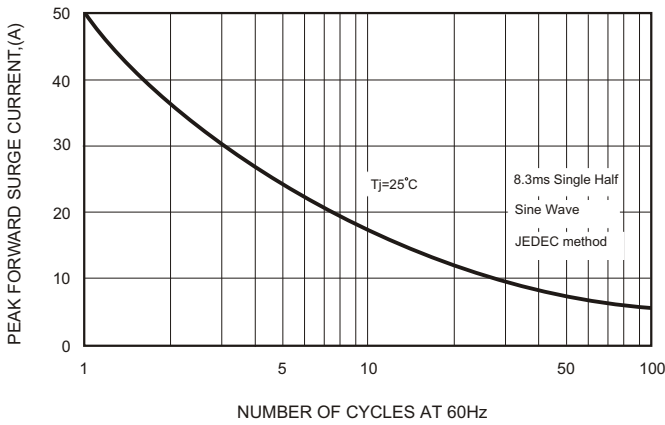


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

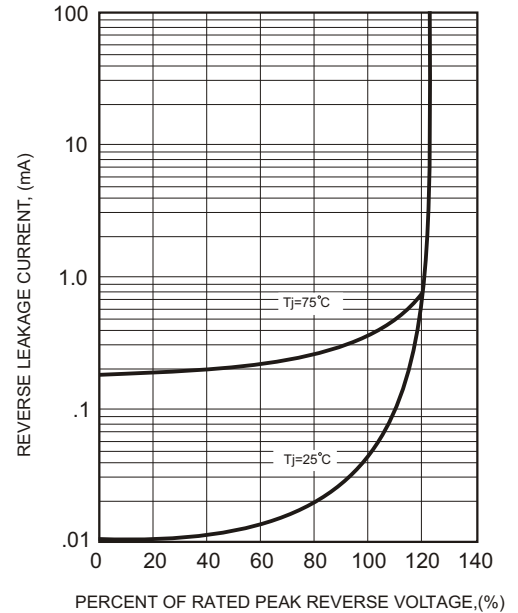


FIG.4-TYPICAL JUNCTION CAPACITANCE

