

VOLTAGE RANGE: 20 - 100V

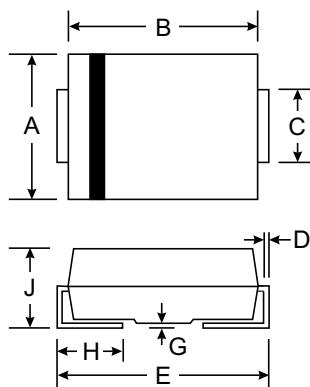
CURRENT: 1.0 A

Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O

Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)



SMA(DO-214AC)		
Dim	Min	Max
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	MBRA 120	MBRA 130	MBRA 140	MBRA 150	MBRA 160	MBRA 180	MBRA 190	MBRA 1100	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	20	30	40	50	60	80	90	100	V
RMS Reverse Voltage	VR(RMS)	14	21	28	35	42	56	64	71	V
Average Rectified Output Current @T _L = 75°C	Io	1.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30								A
Forward Voltage @IF = 1.0A	VFM	0.50			0.70		0.85			V
Peak Reverse Current @TA = 25°C At Rated DC Blocking Voltage @TA = 100°C	IRM	0.5 20								mA
Typical Thermal Resistance (Note 1)	RθJL RθJA	28 88								°C/W
Operating Temperature Range	Tj	-65 to +125								°C
Storage Temperature Range	TSTG	-65 to +150								°C

Note: 1. Mounted on P.C. Board with 5.0mm² copper pad area.

RATING AND CHARACTERISTIC CURVES (MBRA120 - MBRA1100)

FIG.1 - FORWARD CURRENT DERATING CURVE

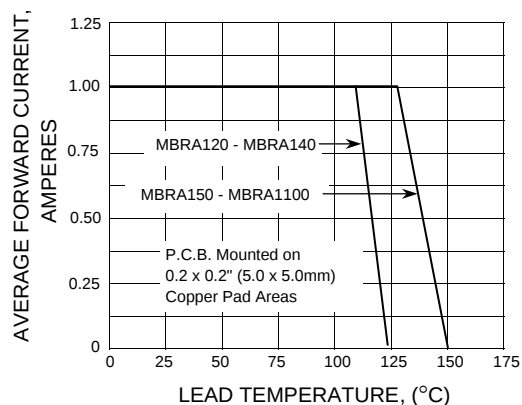


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

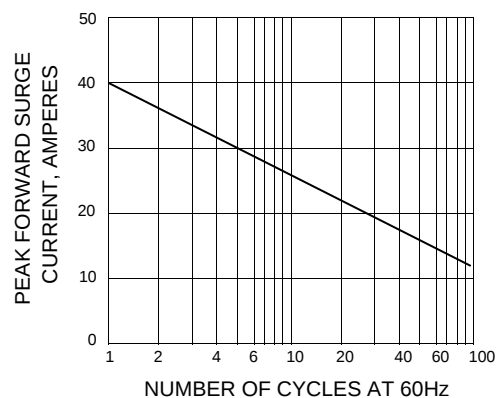


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

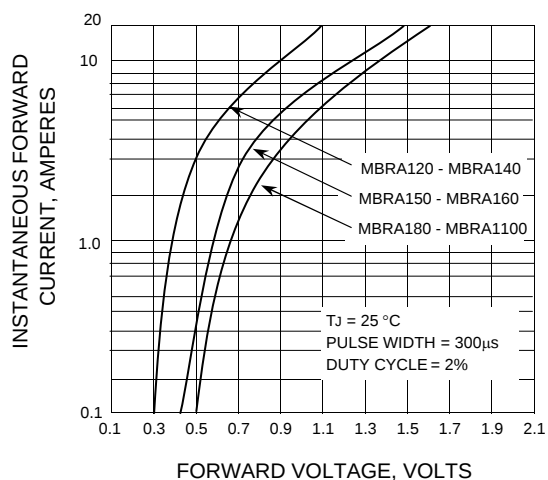


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

