

**VOLTAGE RANGE: 30 - 100V**  
**CURRENT: 1.0 A**

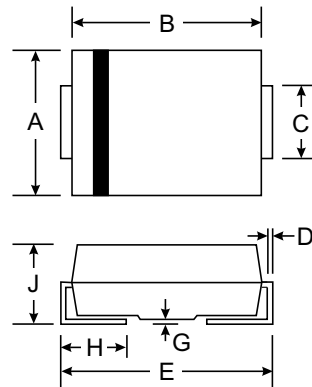


### Features

- 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<sub>A</sub> = 25°C unless otherwise specified

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

Characteristic	Symbol	10MQ030	10MQ040	10MQ060	10MQ100	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	30	40	60	100	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	21	28	42	71	V
Average Rectified Output Current @T <sub>L</sub> = 75°C	I <sub>O</sub>	1.0				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30				A
Forward Voltage @I <sub>F</sub> = 1.0A	V <sub>FM</sub>	0.50		0.70	0.85	V
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T = 100°C	I <sub>RM</sub>			0.5 20		mA
Typical Thermal Resistance (Note 1)	R <sub>θJL</sub> R <sub>θJA</sub>			36 80		°C/W
Operating Temperature Range	T <sub>j</sub>	-65 to +125				°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150				°C

Note: 1. Mounted on P.C. Board with 5.0mm<sup>2</sup> copper pad area.

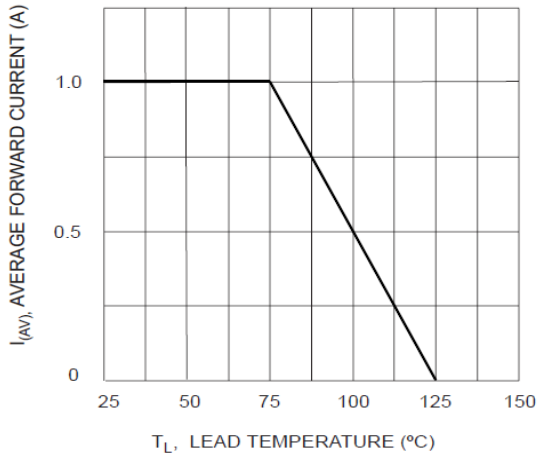


Fig. 1 Forward Current Derating Curve

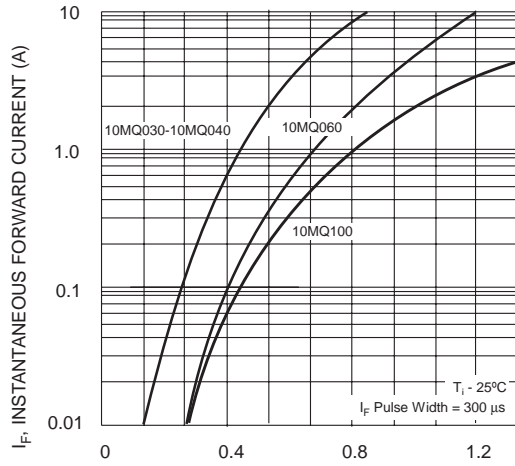


Fig. 2 Typ. Forward Characteristics

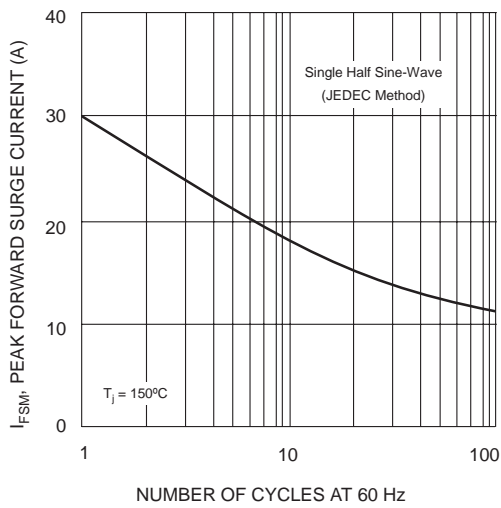


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

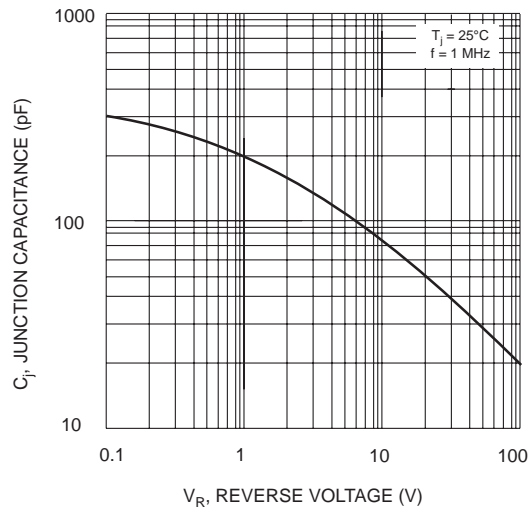


Fig. 4 Typical Junction Capacitance

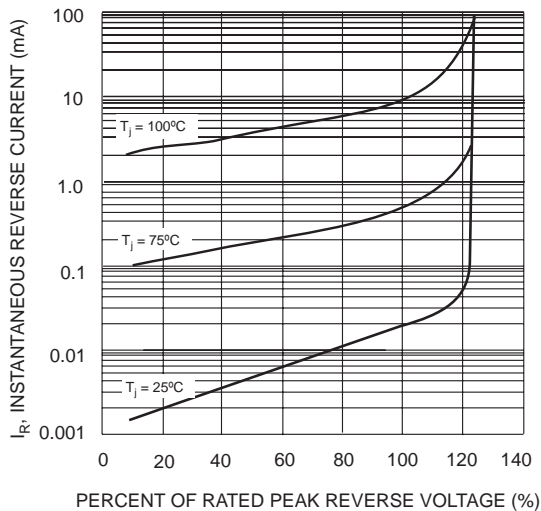


Fig. 5 Typical Reverse Characteristics