

10MQ040N

PRV : 40 Volts

I_{F(AV)} : 1.5 Amperes

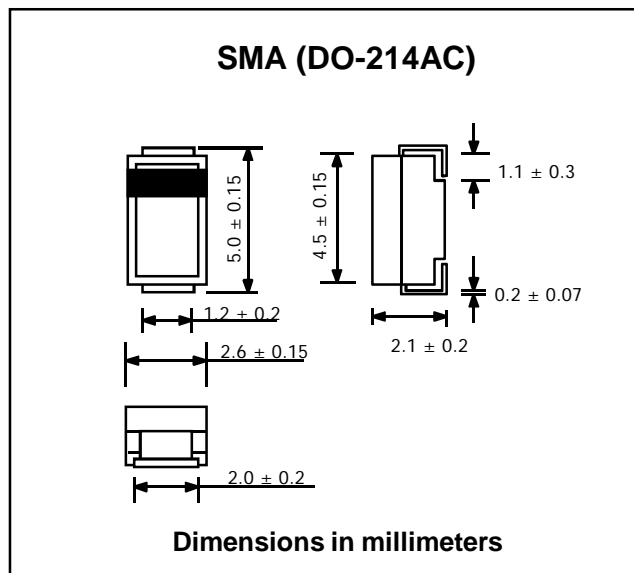
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * High efficiency
- * Low power loss
- * Low forward voltage drop
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : SMA Molded plastic
- * Epoxy : UL94V-0 rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.067 gram

SCHOTTKY RECTIFIER



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNIT
Maximum Work Peak Reverse Voltage	V _{RWM}	40	V
Maximum DC Reverse Voltage	V _R	40	V
Maximum Average Forward Current at DC	I _{F(AV)}	2.1	A
Maximum Average Forward Current 50 % duty cycle at T _L = 123 °C, rectangular waveform On PC board 9 mm ² island (0.013 mm thick copper pad area)	I _{F(AV)}	1.5	A
Maximum Peak Forward Surge Current, One cycle Non-Repetitive , 10 ms sine wave	I _{FSM}	30	A
Maximum Forward Voltage	V _F	at I _F = 1.0 A , T _J = 25°C	0.54
		at I _F = 1.5 A , T _J = 25°C	0.62
Maximum Reverse Current at V _R = Rated V _R	I _R	0.5	mA
	I _{R(H)}	26	
Typical Thermal Resistance	R _{θJA}	80	°C/W
Junction Temperature Range	T _J	- 55 to + 150	°C
Storage Temperature Range	T _{STG}	- 55 to + 150	°C

Note : (1) Pulse Test : Pulse Width = 300 μs, Duty Cycle = 2%.

RATING AND CHARACTERISTIC CURVES (10MQ040N)

FIG.1 - FORWARD CURRENT DERATING CURVE

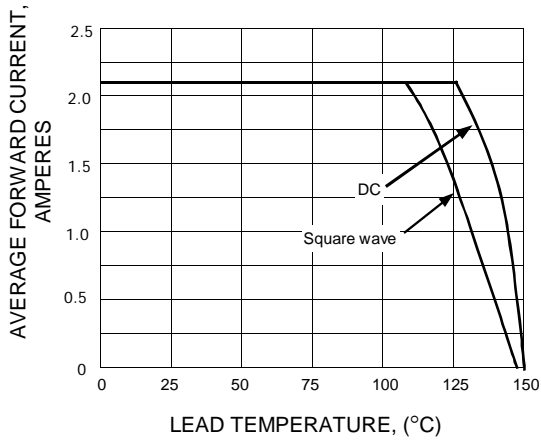


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

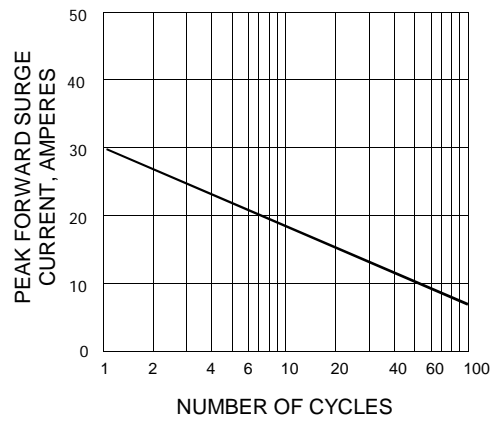


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

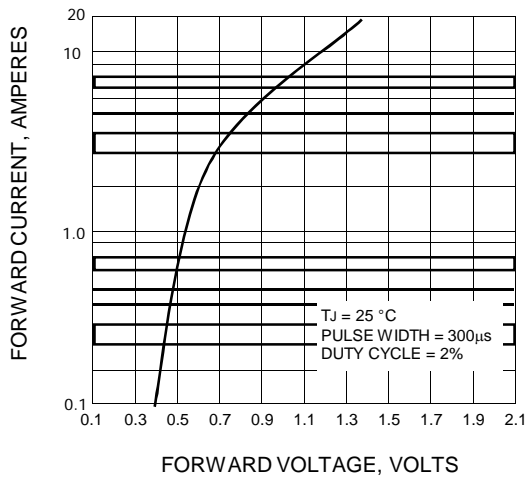


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

