Certificate Number: Q10561

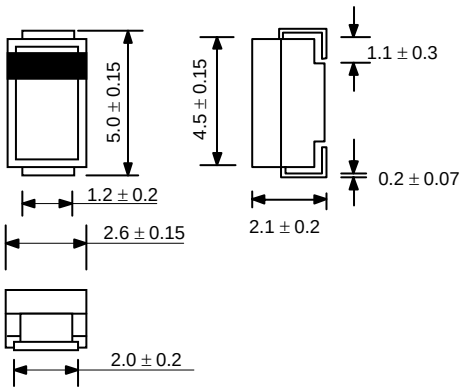
Certificate Number: E17276

10MQ100N

SURFACE MOUNT SCHOTTKY RECTIFIER

PRV : 100 Volts
$I_{F(AV)}$: 1.5 Amperes

SMA (DO-214AC)



Dimensions in millimeter

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-O rate flame retardant
* Lead : Lead Formed for Surface Mount
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 0.067 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specifie.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

RATING	SYMBOL	VALUE	UNIT
Maximum Working Peak Reverse Voltage	V_{RWM}	100	V
Maximum DC Reverse Voltage	V_R	100	V
Maximum Average Forward Current , T_L = 126 °C	$I_{F(AV)}$	1.5	A
Maximum Peak Forward Surge Current, One cycle Non-Repetitive , 10ms sine wave	I_{FSM}	30	A
Maximum Forward Voltage at I_F = 1.0 A , T_J = 25°C	V_F	0.78	V
Maximum Forward Voltage at I_F = 1.5 A , T_J = 25°C		0.85	
Maximum Reverse Current at T_J = 25 °C	I_R	0.1	mA
Rated DC Blocking Voltage (Note 1) T_J = 125 °C	$I_{R(H)}$	1.0	
Typical Thermal Resistance	RθJA	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 (10MQ100N)

FIG.1 - FORWARD CURRENT DERATING CURVE

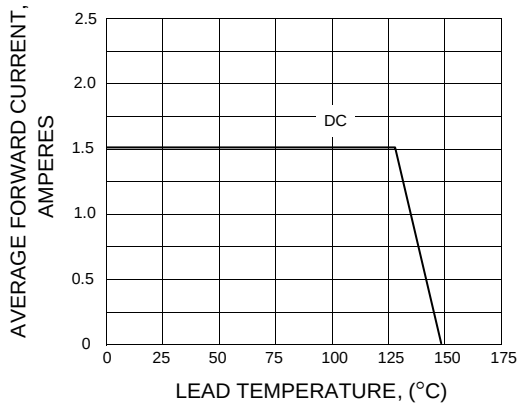


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

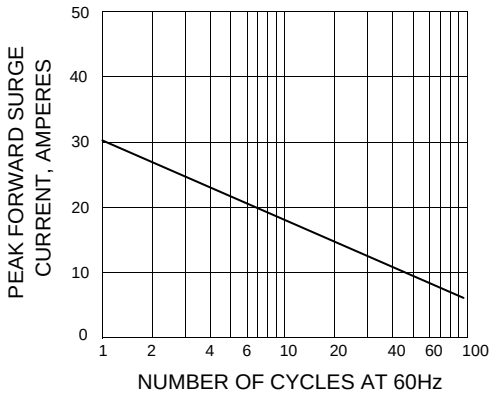


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

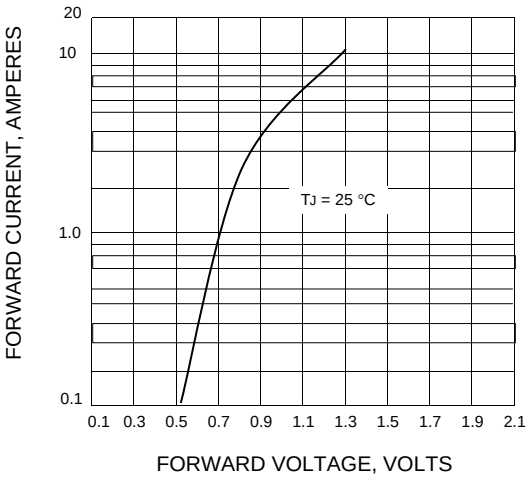


FIG.4 - TYPICAL REVERSE CHARACTERISTICS