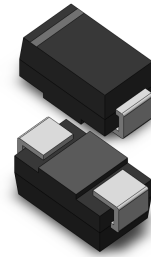


VOLTAGE RANGE: 30V
CURRENT: 1.0 A

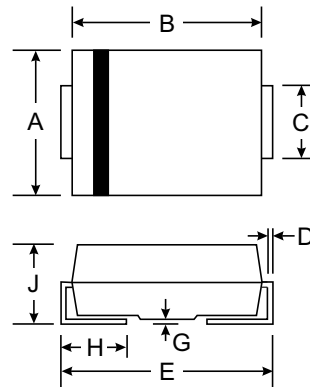


Features

- Miniature Size, Surface Mount Device
- Extremely Low Forward Voltage Drop
- High Surge Capability
- Low Power Loss, High Efficiency
- Packaged in 12mm Tape and Reel
- Not Rolling During Assembly

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		

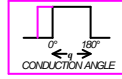
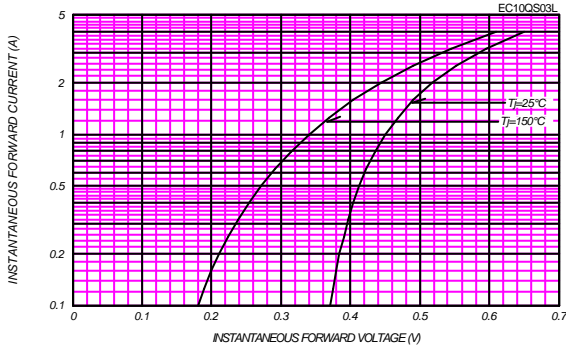
Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

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

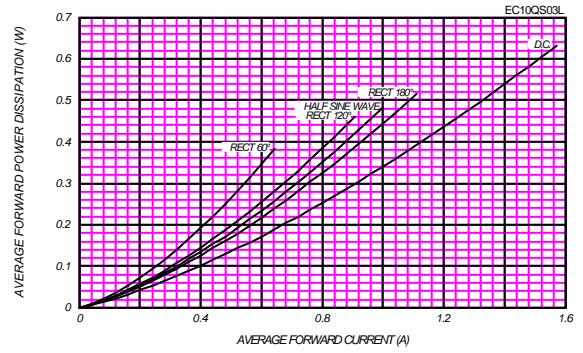
Characteristic	Symbol	Limits	Unit
Repetitive Peak Reverse Voltage	VRRM	30	V
Average Rectified Forward Current 50Hz Half Sine Wave Resistive Load	I _O	1.0 1.0	A
R.M.S. Forward Current	I _{F(RMS)}	1.57	A
Surge Forward Current 50Hz Half Sine Wave, 1 cycle, Non-repetitive	I _{FSM}	20	A
Operating Junction Temperature Range	T _{jw}	-40 to +150	°C
Storage Temperature Range	T _{stg}	-40 to +150	°C

Characteristic	Symbol	Min	Typ	Max	Unit
Peak Reverse Current	I _{RM}	-	-	1.0	μA
Peak Forward Voltage	V _{FM}	-	-	0.45	V
Thermal Resistance Junction to Ambient	R _{th(j-a)}	-	-	157	°C /W
		-	-	108	

FORWARD CURRENT VS. VOLTAGE

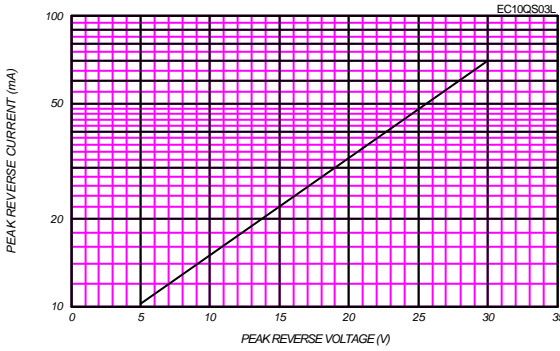


AVERAGE FORWARD POWER DISSIPATION

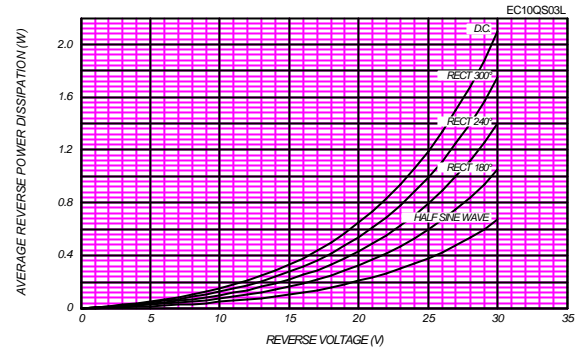


PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

$T_j = 150^\circ\text{C}$

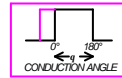
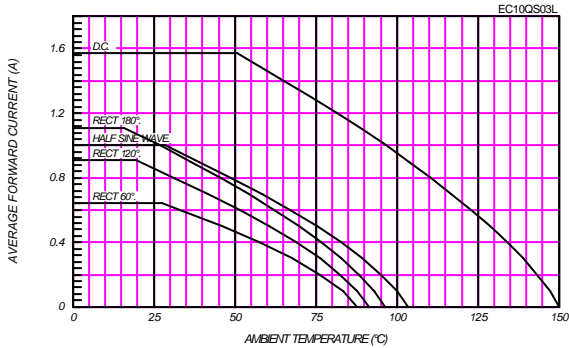


AVERAGE REVERSE POWER DISSIPATION



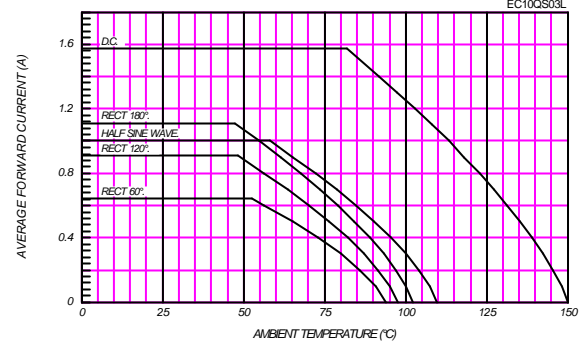
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Glass-Epoxy Substrate mounted(Land=2x2mm), $V_{RM}=30V$



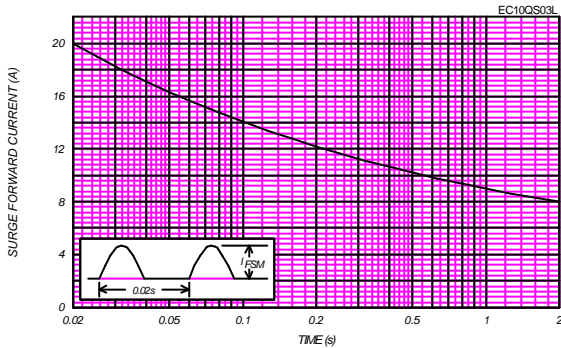
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Alumina Substrate mounted(Land=2x2mm), $V_{RM}=30V$



SURGE CURRENT RATINGS

$f=50\text{Hz}$, Half Sine Wave, Non-Repetitive, No Load



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

$T_j=25^\circ\text{C}$, $V_m=20\text{mV}_{RMS}$, $f=100\text{kHz}$, Typical Value

