

10A 30V Cathode Common

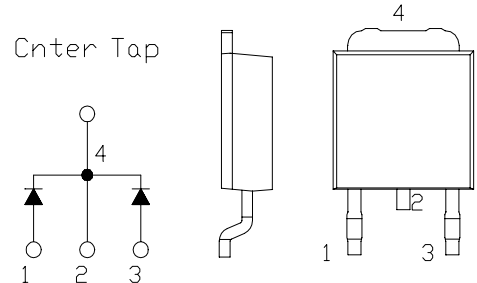
SBD Type : ECQ10A03L-F

OUTLINE DRAWING

For High Frequency Rectification

FEATURES

- * Dpak surface mount model
- * Dual Diodes Cathode Common
- * Low Forward Voltage Drop and Low Noise



Maximum Ratings

Approx Net Weight:0.30g

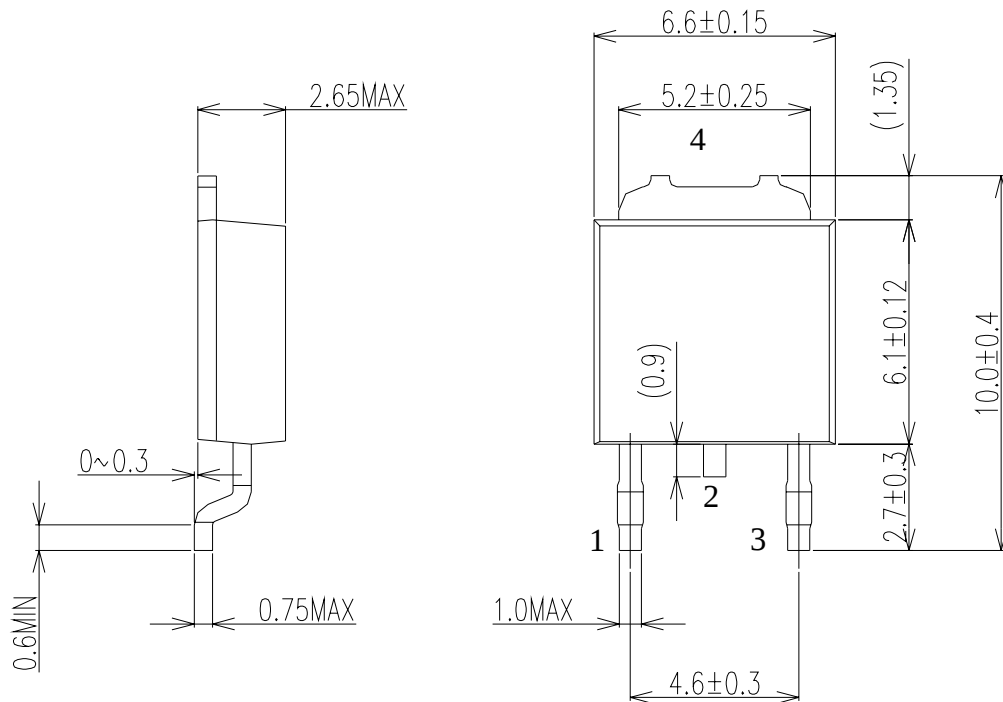
Rating	Symbol	ECQ10A03L-F			Unit
Repetitive Peak Reverse Voltage	V _{RRM}	30			V
Average Rectified Output Current	I _O	10	Tc=106℃	50 Hz,Full Sine Wave Resistive Load	A
		2.0	Ta=30℃	50 Hz,Full Sine Wave Resistive Load P.C.Board mounted *	
RMS Forward Current	I _{F(RMS)}	11.1			A
Surge Forward Current	I _{FSM}	100	50 Hz Full Sine Wave,1cycle Non-repetitive		A
Operating JunctionTemperature Range	T _{jw}	- 40 to + 150			℃
Storage Temperature Range	T _{stg}	- 40 to + 150			℃

Electrical • Thermal Characteristics

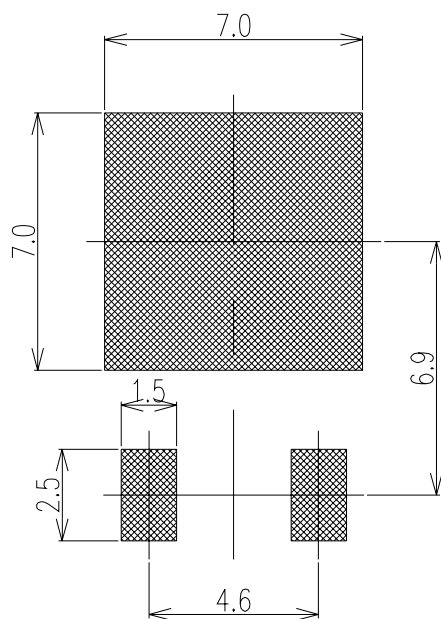
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j=25^{\circ}\text{C}, V_{RM}=V_{RRM}$ per Diode	-	-	5	mA
Peak Forward Voltage	V_{FM}	$T_j=25^{\circ}\text{C}, I_{FM}=5\text{A}$ per Diode	-	-	0.47	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	4	$^{\circ}\text{C/W}$
	$R_{th(j-a)}$	Junction to Ambient With P.C.Board mounted *	-	-	80	

*: Print Land 20x20

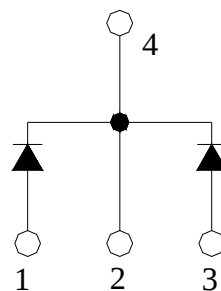
ECQ10A03L-F OUTLINE DRAWING (Dimensions in mm)



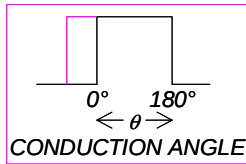
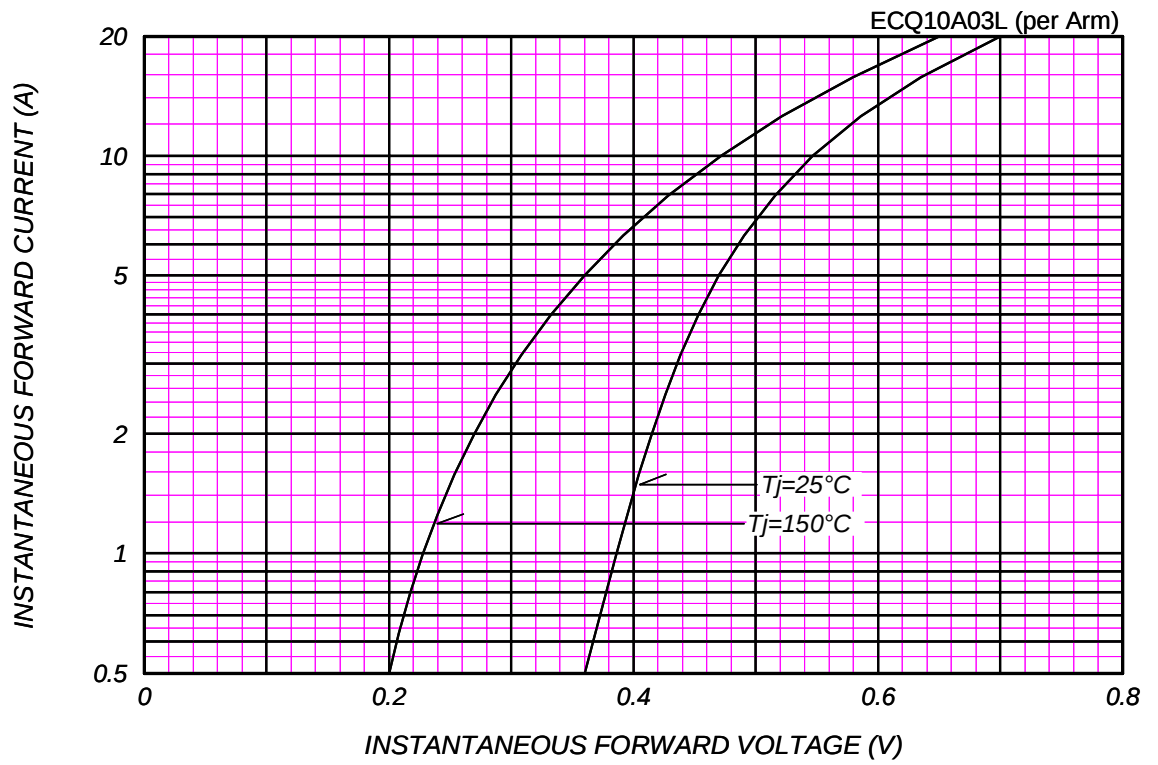
Soldering PAD



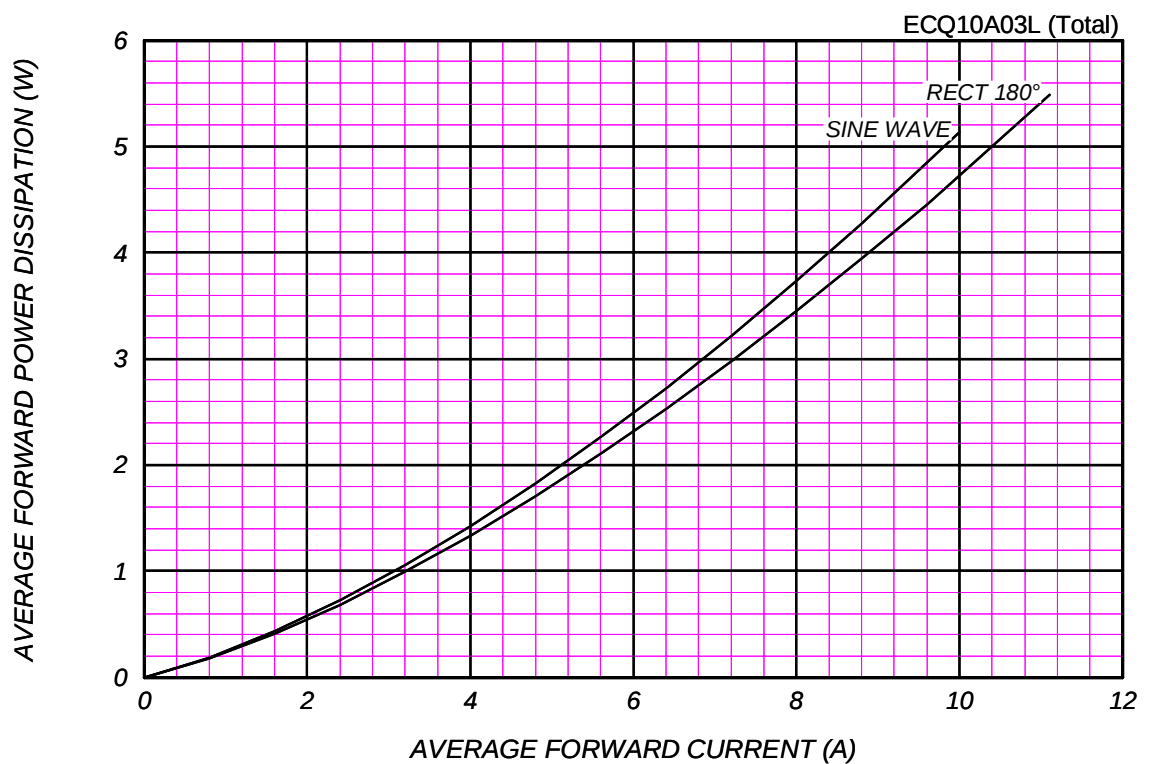
Center Tap



FORWARD CURRENT VS. VOLTAGE



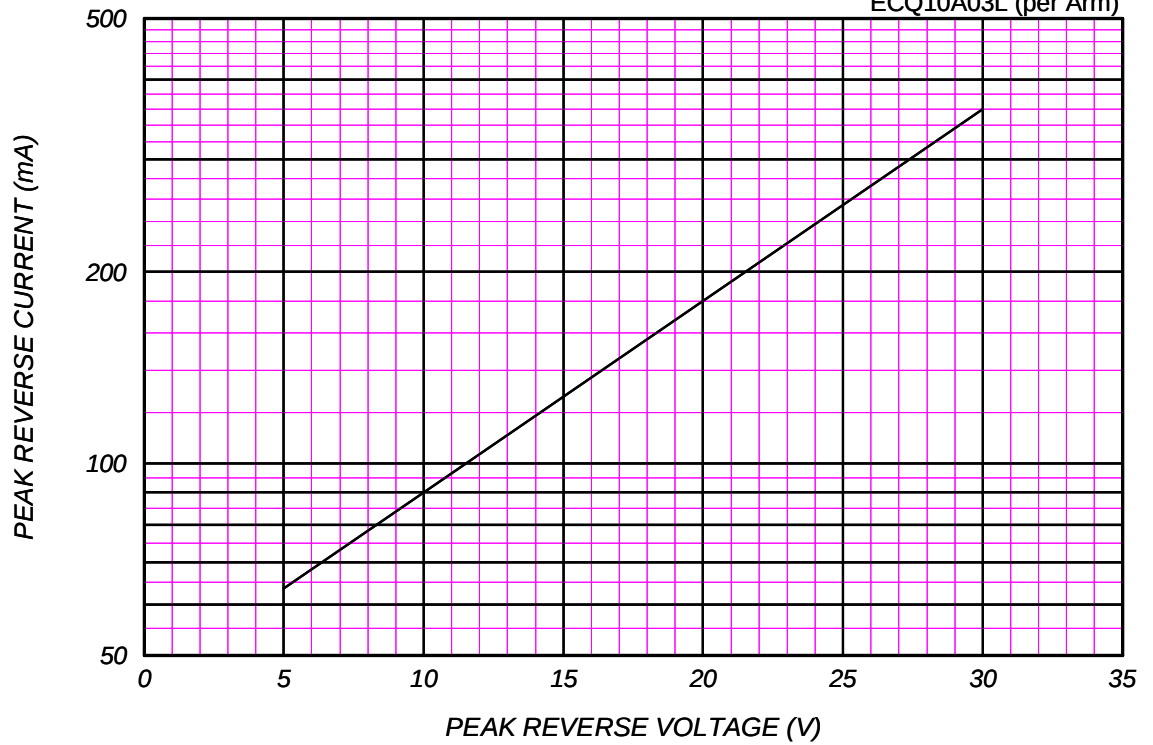
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

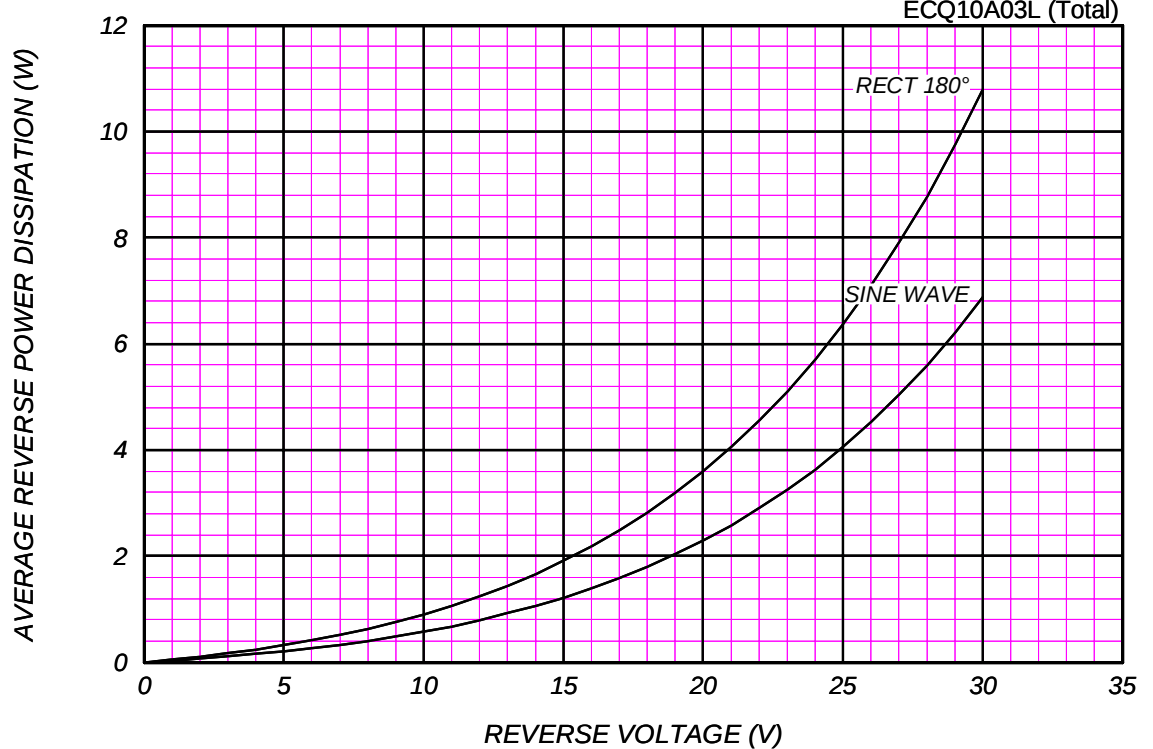
$T_j = 150\text{ }^{\circ}\text{C}$

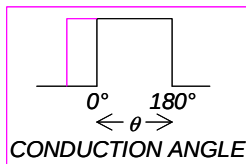
ECQ10A03L (per Arm)



AVERAGE REVERSE POWER DISSIPATION

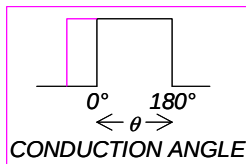
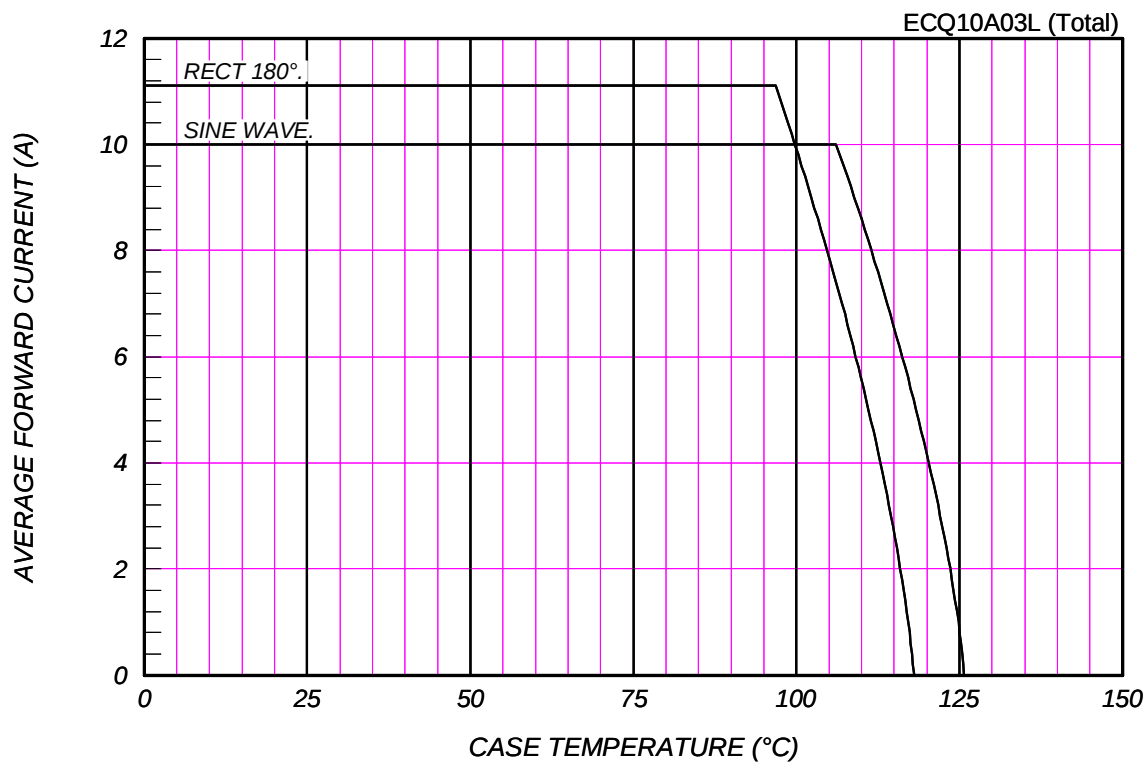
ECQ10A03L (Total)





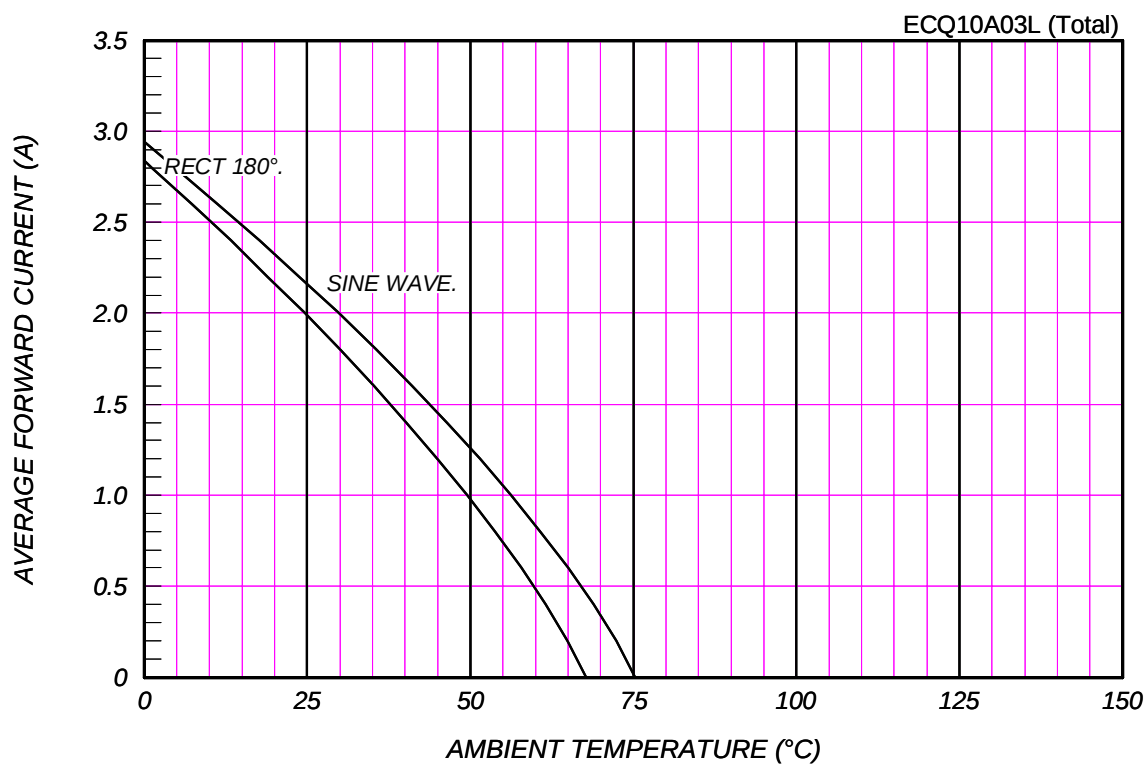
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=30V$



AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

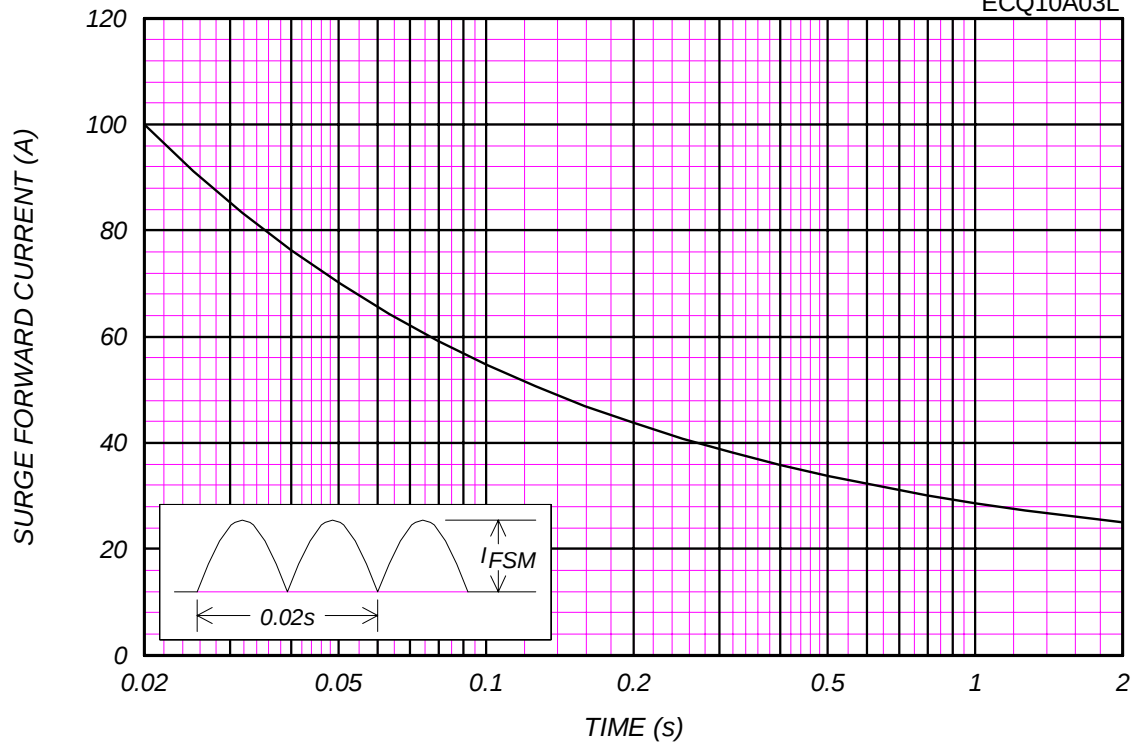
$V_{RM}=30V$



SURGE CURRENT RATINGS

f=50Hz,Sine Wave,Non-Repetitive,No Load

ECQ10A03L



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

T_j=25°C,V_m=20mV_{RMS},f=100kHz,Typical Value

ECQ10A03L (per Arm)

