

10A 40V Cathode Common

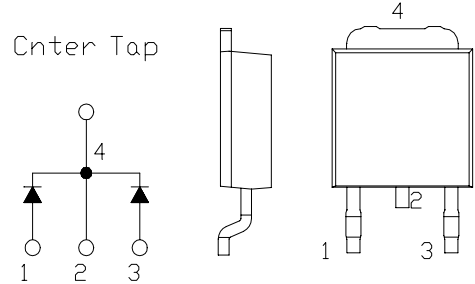
SBD Type : **ECQ10A04-F**

OUTLINE DRAWING

For High Frequency Rectification

FEATURES

- * High VRM SBD
- * Low Forward Voltage Drop and Low Noise
- * Fully Molded Isolation
- * Dual Diodes Cathode Common



Maximum Ratings

Approx Net Weight:0.30g

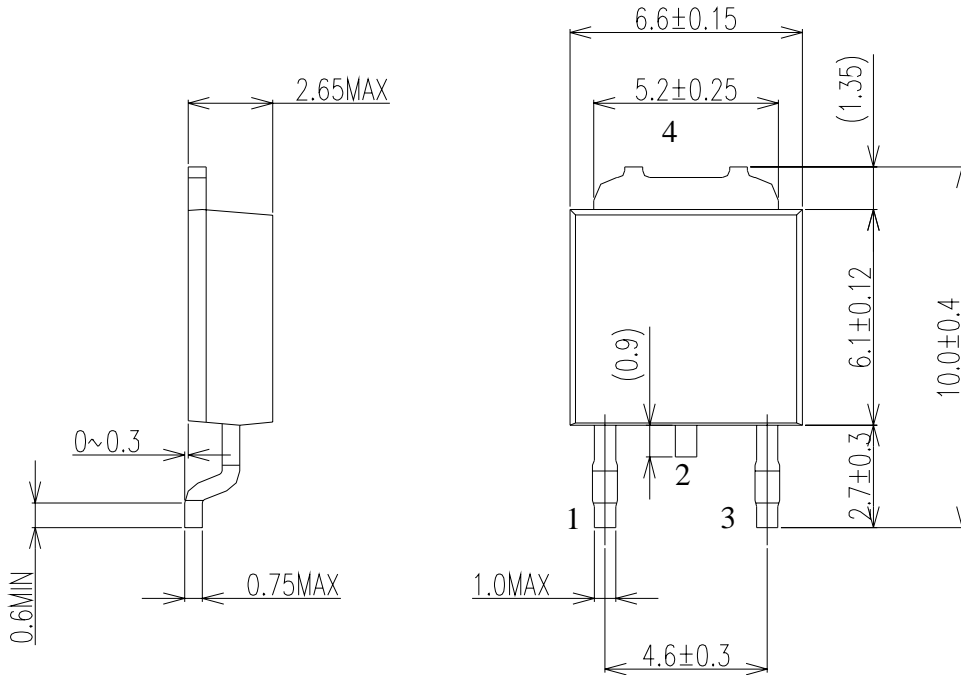
Rating	Symbol	ECQ10A04-F			Unit
Repetitive Peak Reverse Voltage	V_{RRM}	40			V
Average Rectified Output Current	I_o	10	$T_c=105^{\circ}C$	50 Hz, Full Sine Wave Resistive Load	A
		2.0	$T_a=28^{\circ}C$	50 Hz, Full Sine Wave Resistive Load P.C.Board mounted *	
RMS Forward Current	$I_{F(RMS)}$	11.1			A
Surge Forward Current	I_{FSM}	100	50 Hz Full Sine Wave, 1cycle Non-repetitive		A
Operating Junction Temperature Range	T_{jw}	- 40 to + 150			$^{\circ}C$
Storage Temperature Range	T_{stg}	- 40 to + 150			$^{\circ}C$

Electrical • Thermal Characteristics

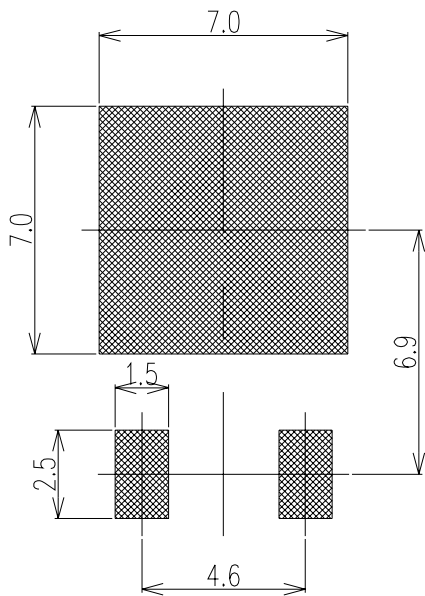
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j=25^{\circ}C, V_{RM}=V_{RRM}$ per Diode	-	-	3	mA
Peak Forward Voltage	V_{FM}	$T_j=25^{\circ}C, I_{FM}=5A$ per Diode	-	-	0.55	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	4	$^{\circ}C/W$
	$R_{th(j-a)}$	Junction to Ambient With P.C.Board mounted *	-	-	80	

*: Print Land 20x20

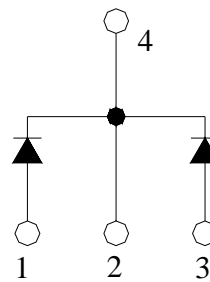
ECQ10A04-F OUTLINE DRAWING (Dimensions in mm)



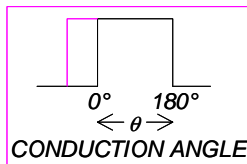
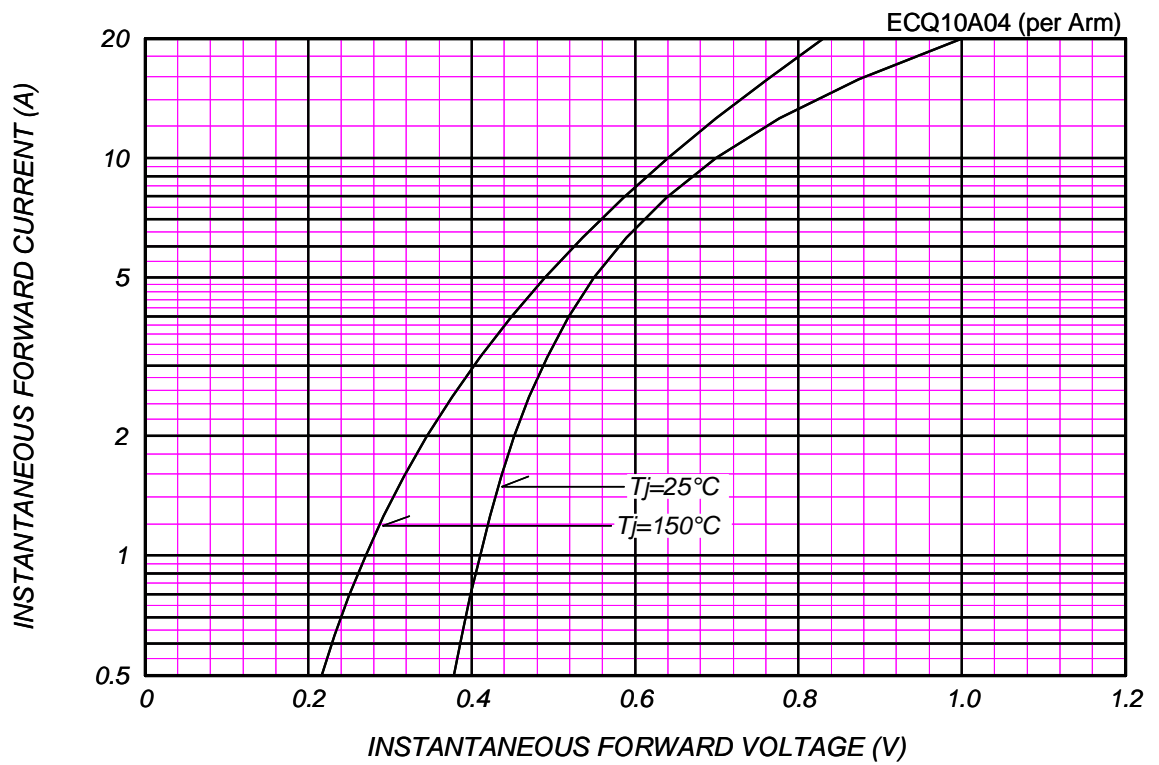
Soldering PAD



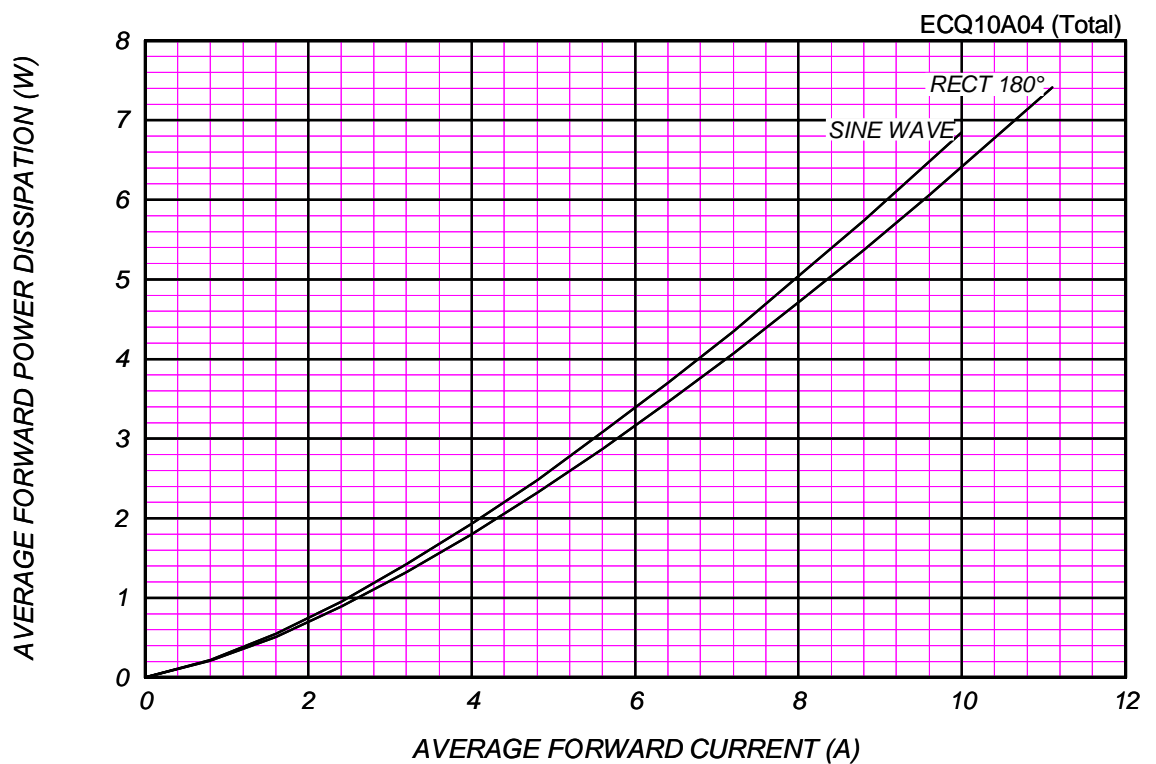
Center Tap



FORWARD CURRENT VS. VOLTAGE



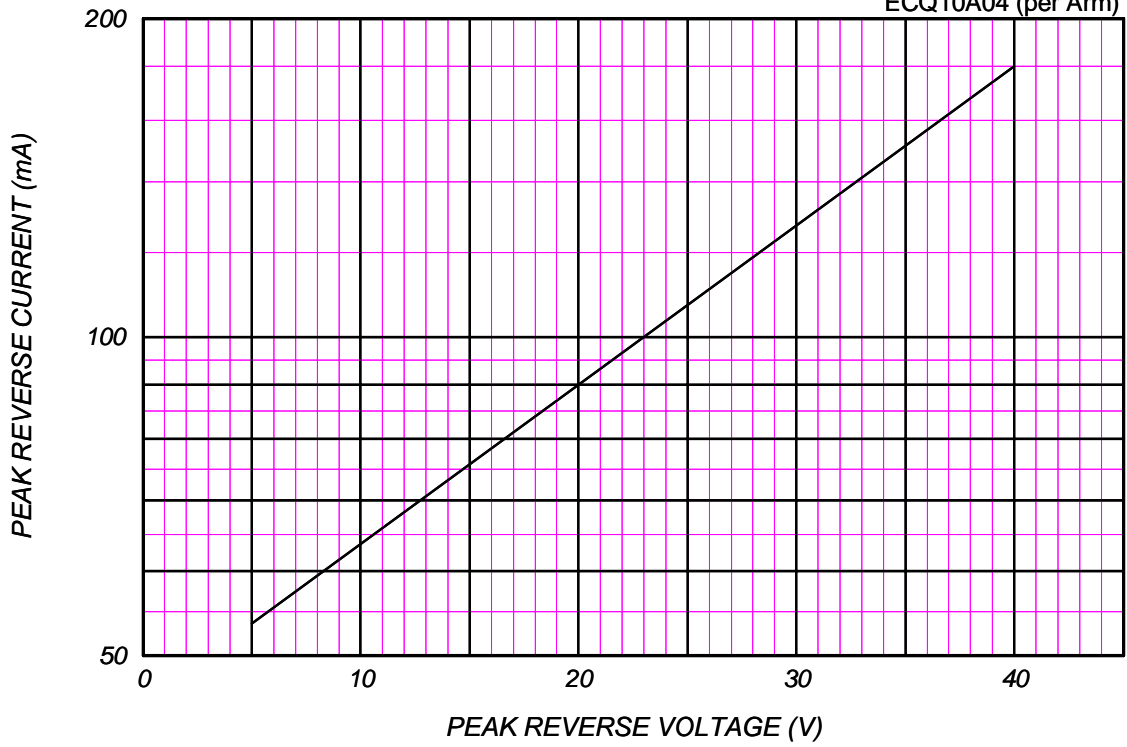
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

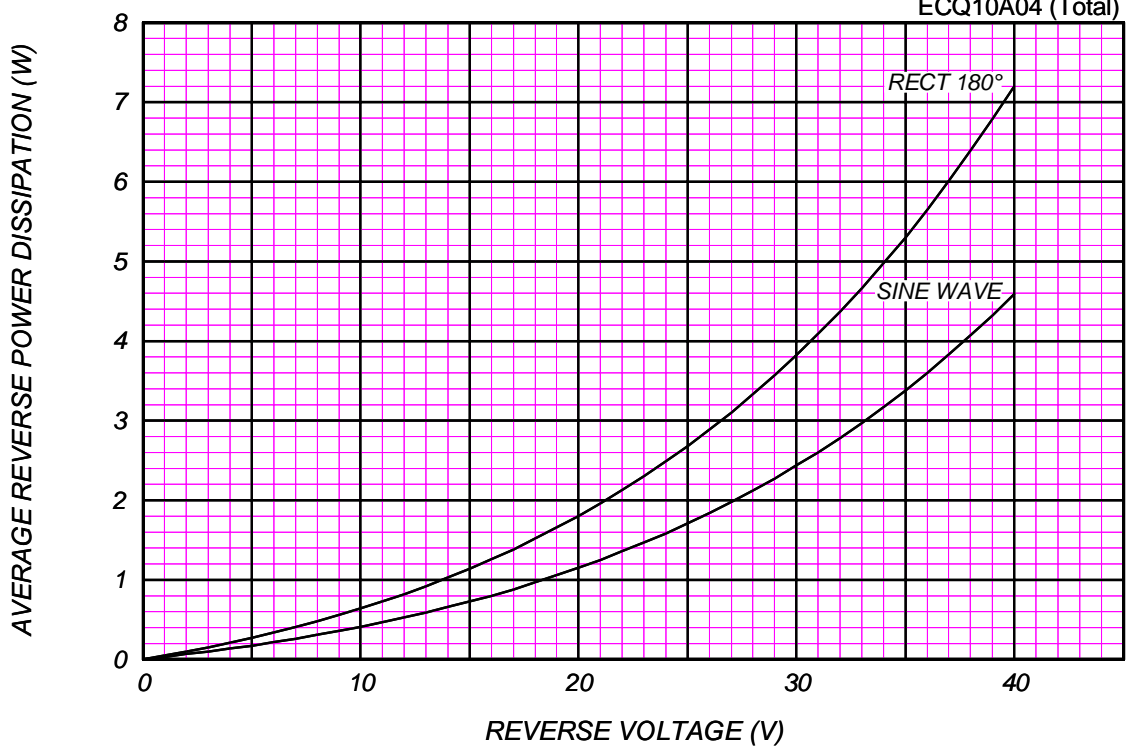
$T_j = 150\text{ }^\circ\text{C}$

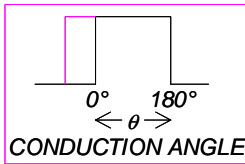
ECQ10A04 (per Arm)



AVERAGE REVERSE POWER DISSIPATION

ECQ10A04 (Total)

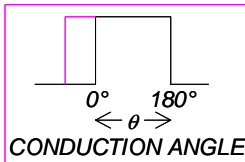
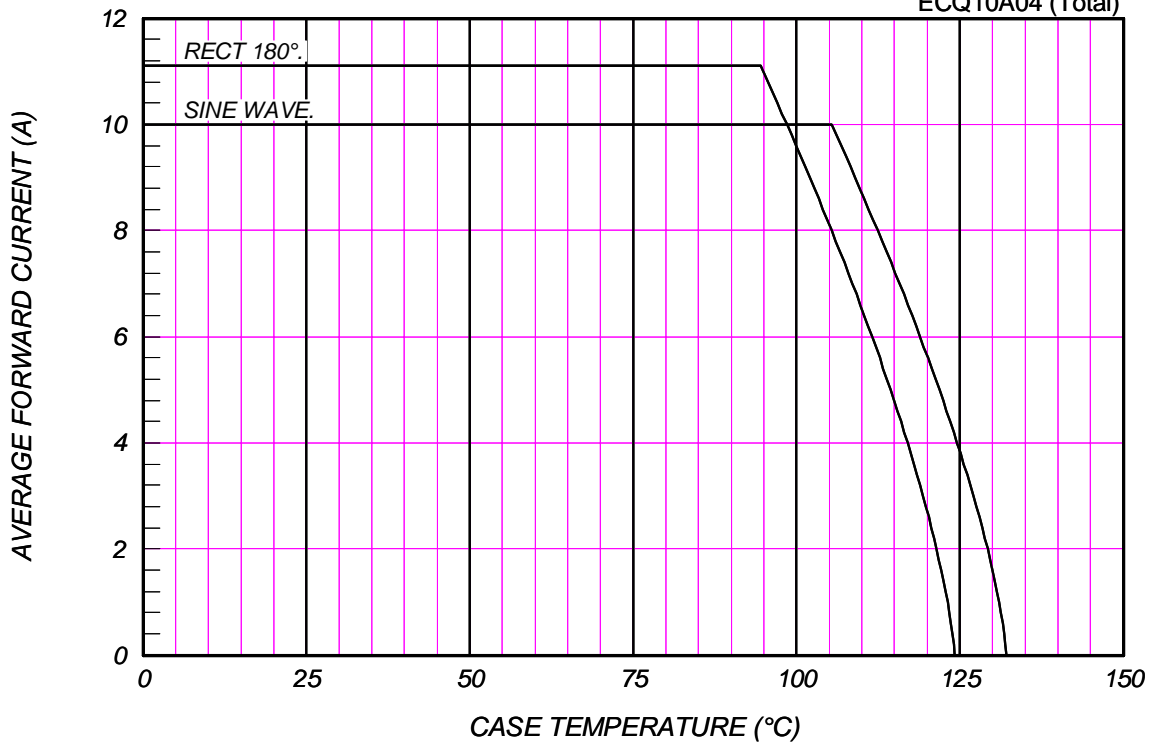




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=40V$

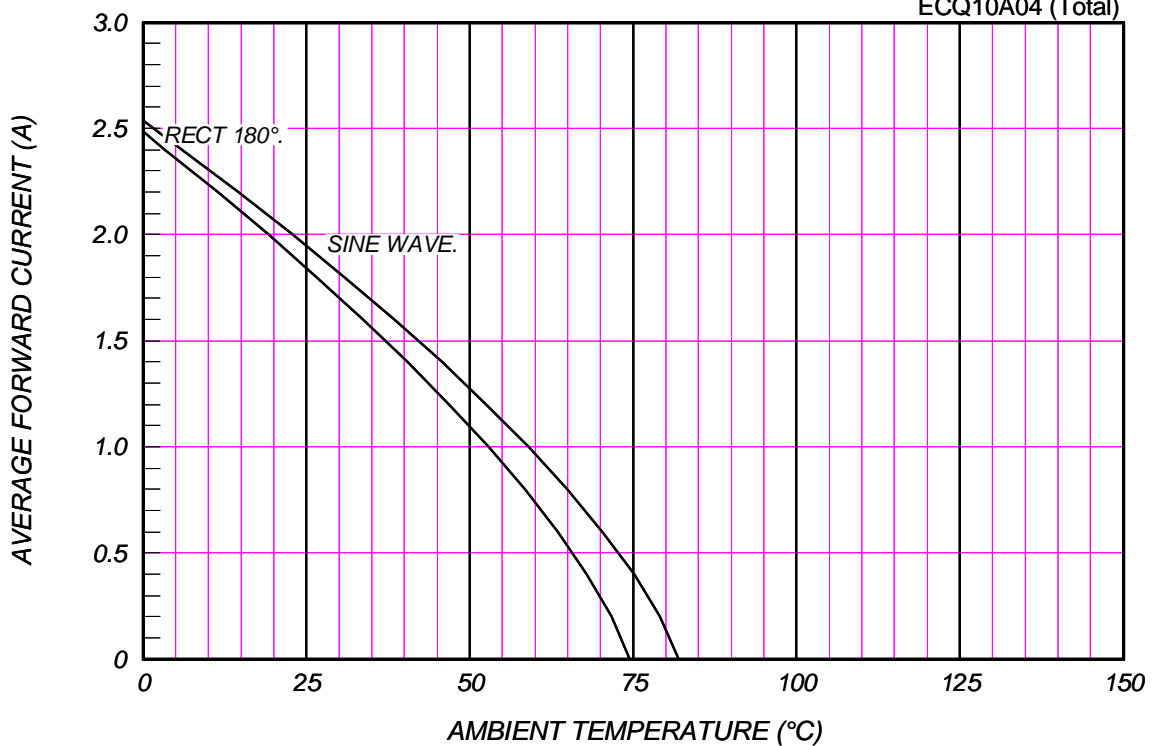
ECQ10A04 (Total)



AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

$V_{RM}=40V, P.C$ Board mounted

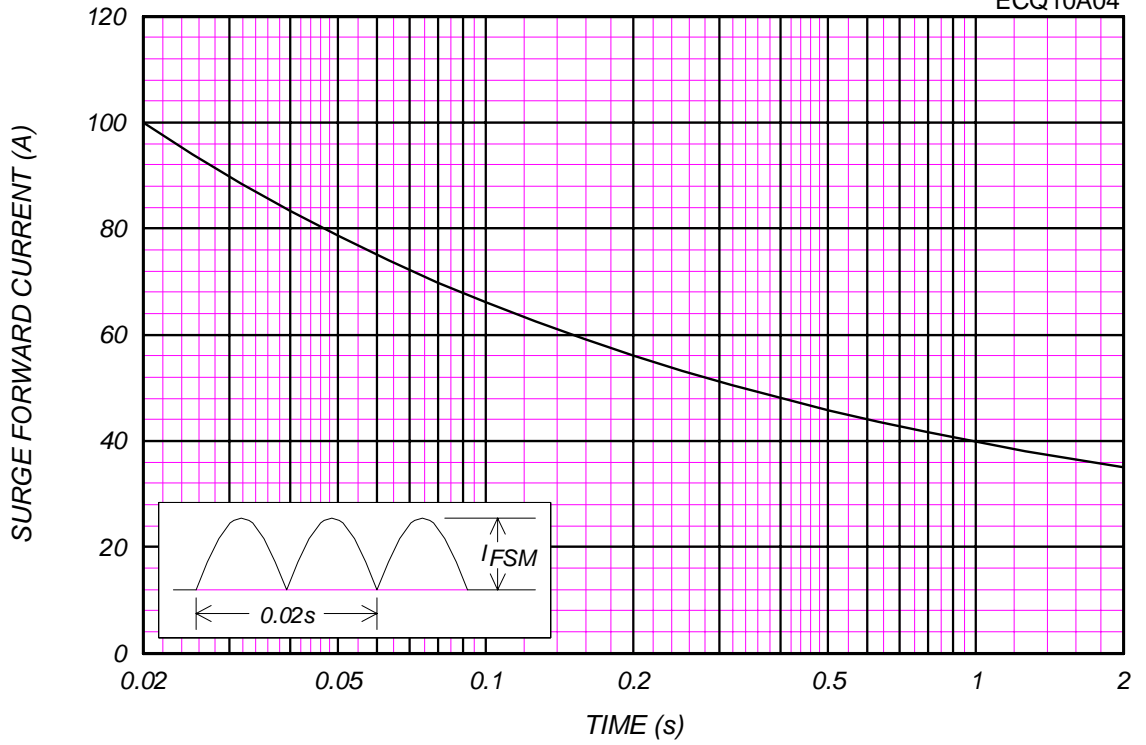
ECQ10A04 (Total)



SURGE CURRENT RATINGS

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

ECQ10A04



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

ECQ10A04 (per Arm)

