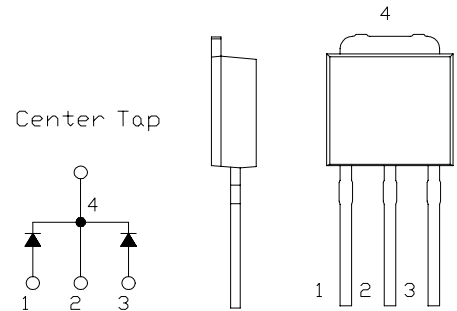


SBD Type : EA40QC09

OUTLINE DRAWING

FEATURES

- * TO-251AA Case
- * Dual Diodes Cathode Common
- * Low Forward Voltage drop
- * Low Power Loss
- * High Surge Capability
- * 40 Volts thru 100 Volts Types Available



Maximum Ratings

Approx Net Weight:0.35g

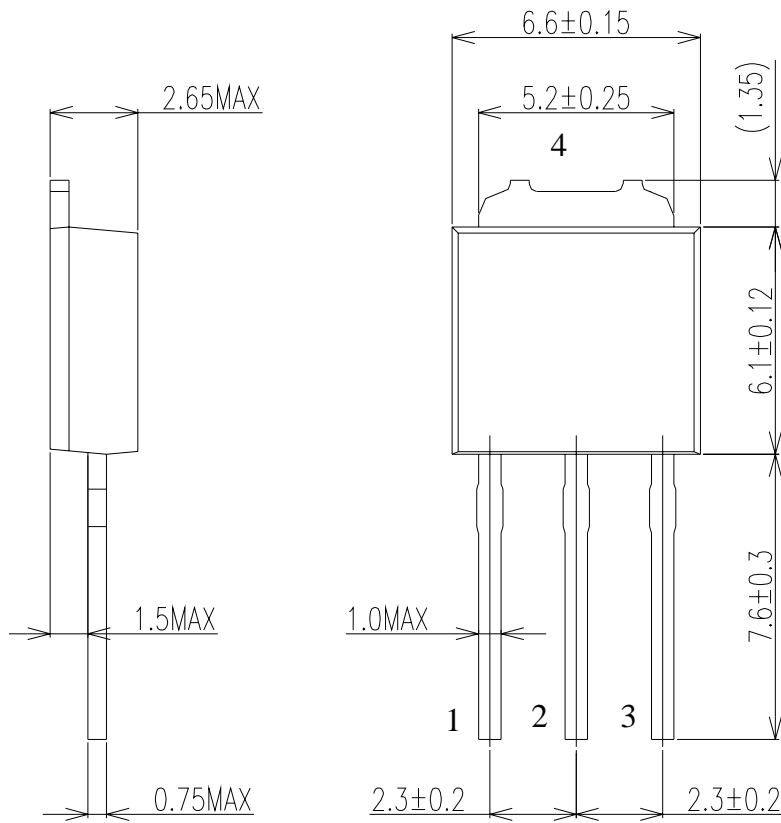
Rating		Symbol	EA40QC09			Unit
Repetitive Peak Reverse Voltage		V _{RRM}	90			V
Average Rectified Output Current	P.C.Board mounted *	I _O	1.6	Ta=39°C	50Hz Full Sine Wave Resistive Load	A
	-		4.0	Tc=130°C		
RMS Forward Current		I _{F(RMS)}	4.44			A
Surge Forward Current		I _{FSM}	40	50Hz Full Sine Wave,1cycle, Non-repetitive		A
Operating JunctionTemperature Range		T _{jw}	- 40 to + 150			°C
Storage Temperature Range		T _{stg}	- 40 to + 150			°C

Electrical • Thermal Characteristics

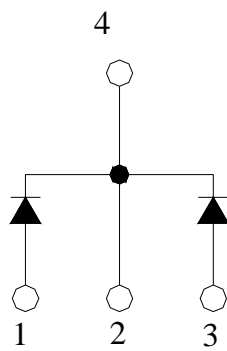
Characteristics		Symbol	Conditions	Min	Typ	Max	Unit
Peak Reverse Current		I_{RM}	$T_j=25^{\circ}\text{C}, V_{RM}=V_{RRM}$ per Arm	-	-	1.0	mA
Peak Forward Voltage		V_{FM}	$T_j=25^{\circ}\text{C}, I_{FM}= 2 \text{ A}$ per Arm	-	-	0.85	V
Thermal Resistance	Junction to Ambient	$R_{th(j-a)}$	P.C.Board mounted *	-	-	80	$^{\circ}\text{C/W}$
	Junction to Case	$R_{th(j-c)}$	-	-	-	5.5	$^{\circ}\text{C/W}$

* Print Land = 20x20 mm

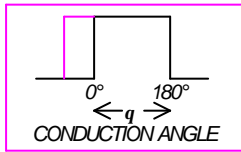
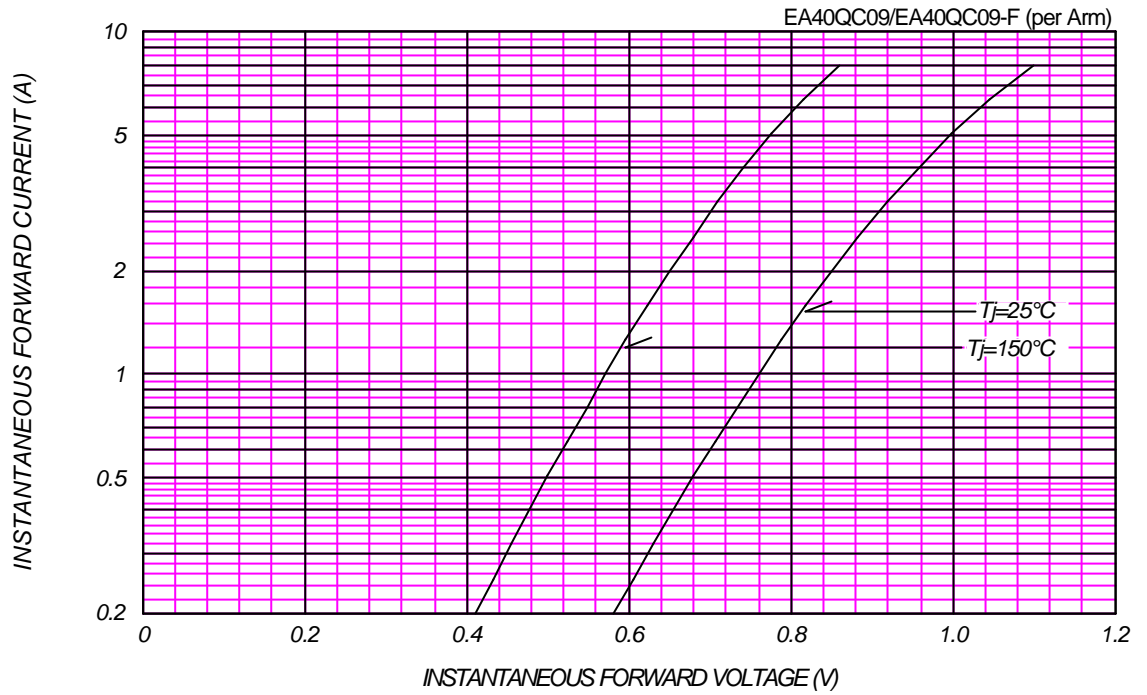
EA40QC09 OUTLINE DRAWING (Dimensions in mm)



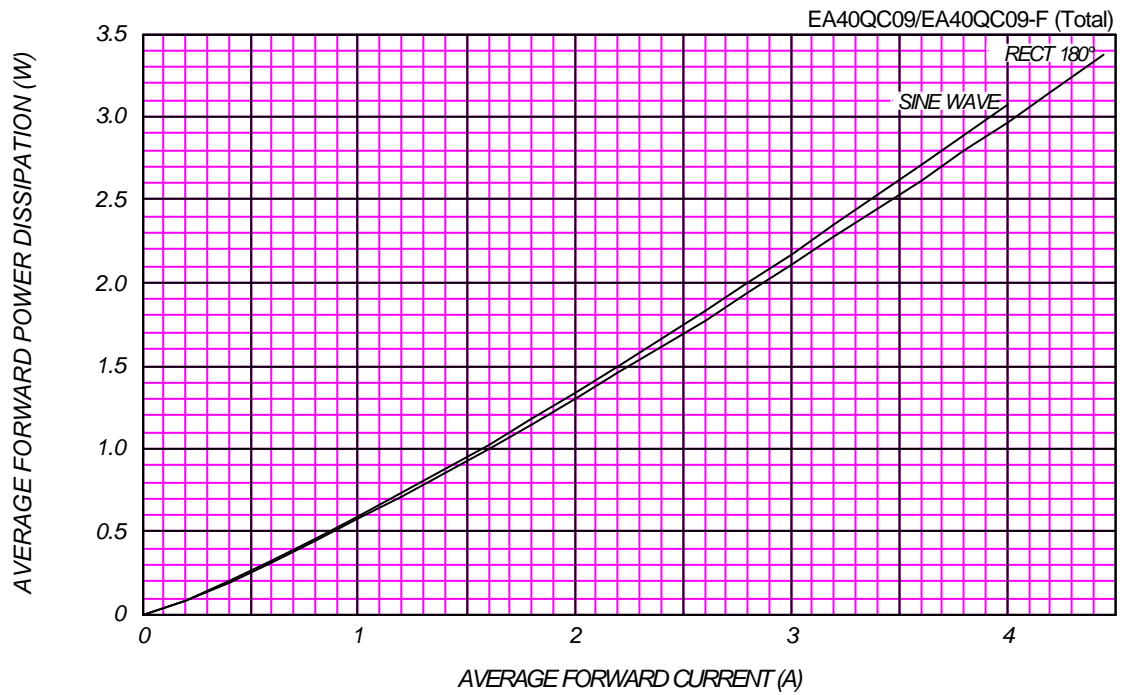
Center Tap



FORWARD CURRENT VS. VOLTAGE



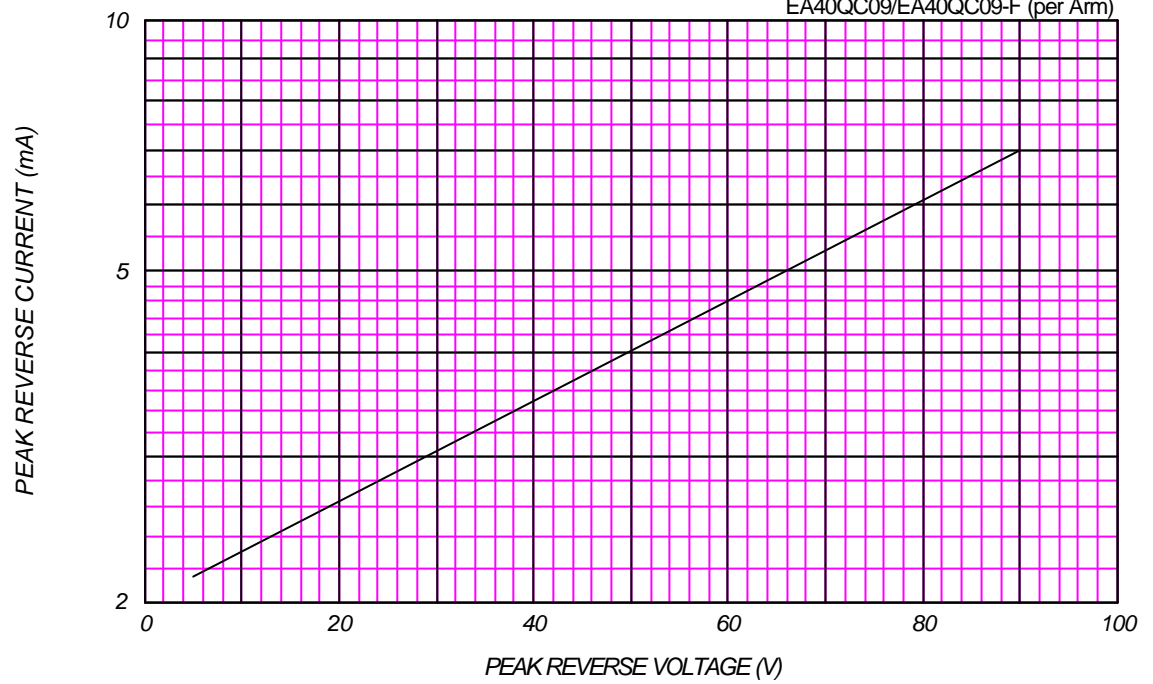
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

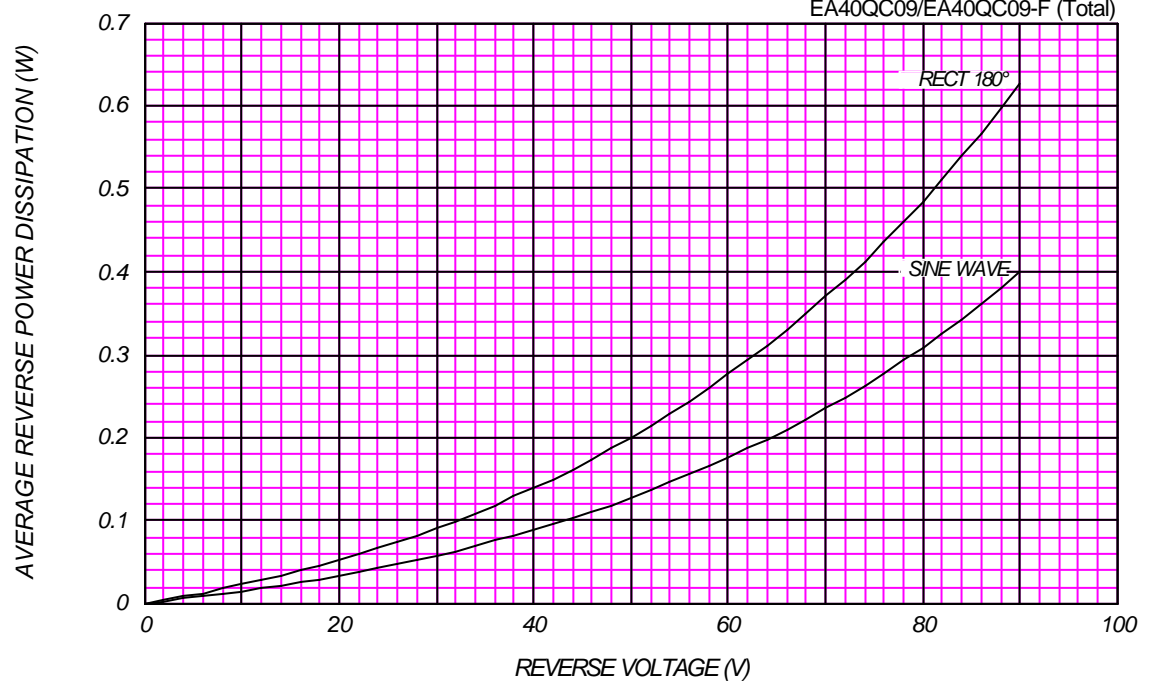
$T_j = 150\text{ }^{\circ}\text{C}$

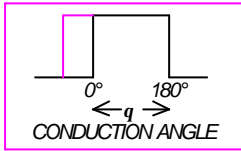
EA40QC09/EA40QC09-F (per Arm)



AVERAGE REVERSE POWER DISSIPATION

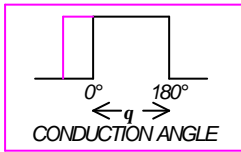
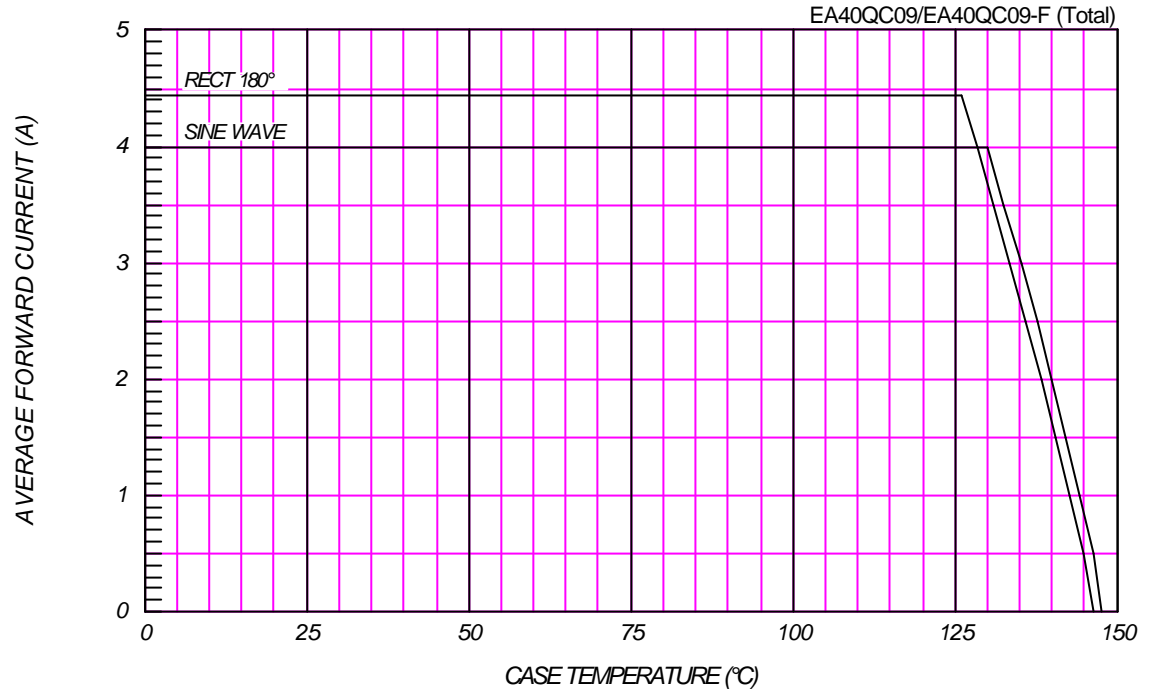
EA40QC09/EA40QC09-F (Total)





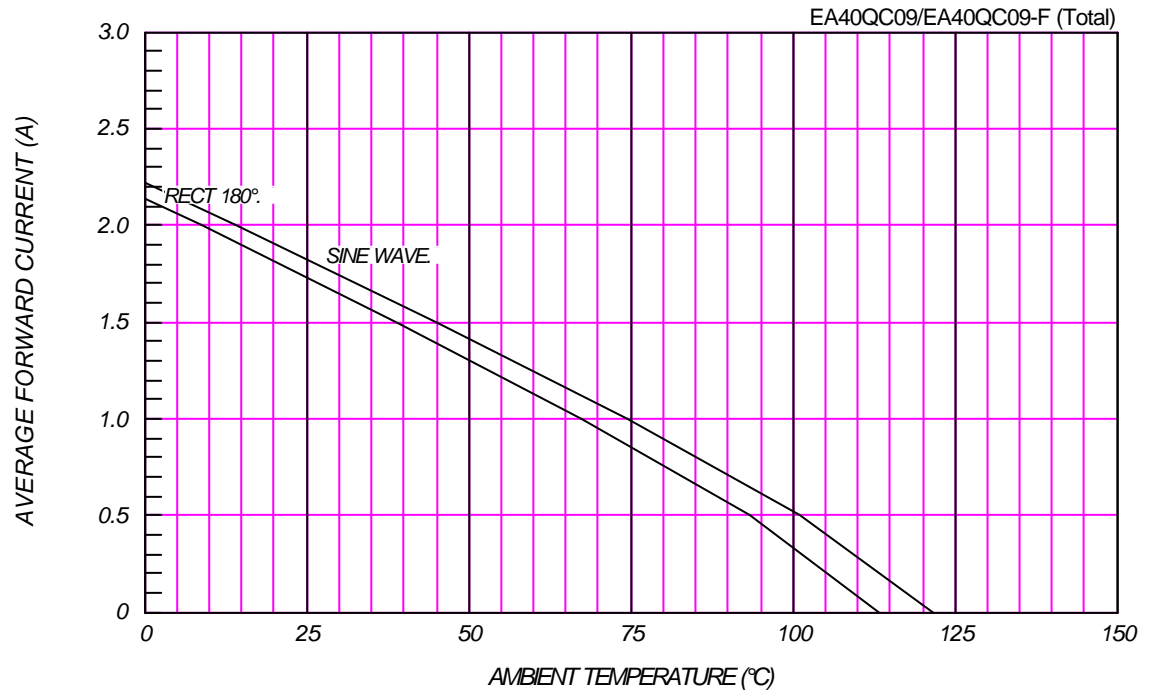
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM} = 100V$



AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

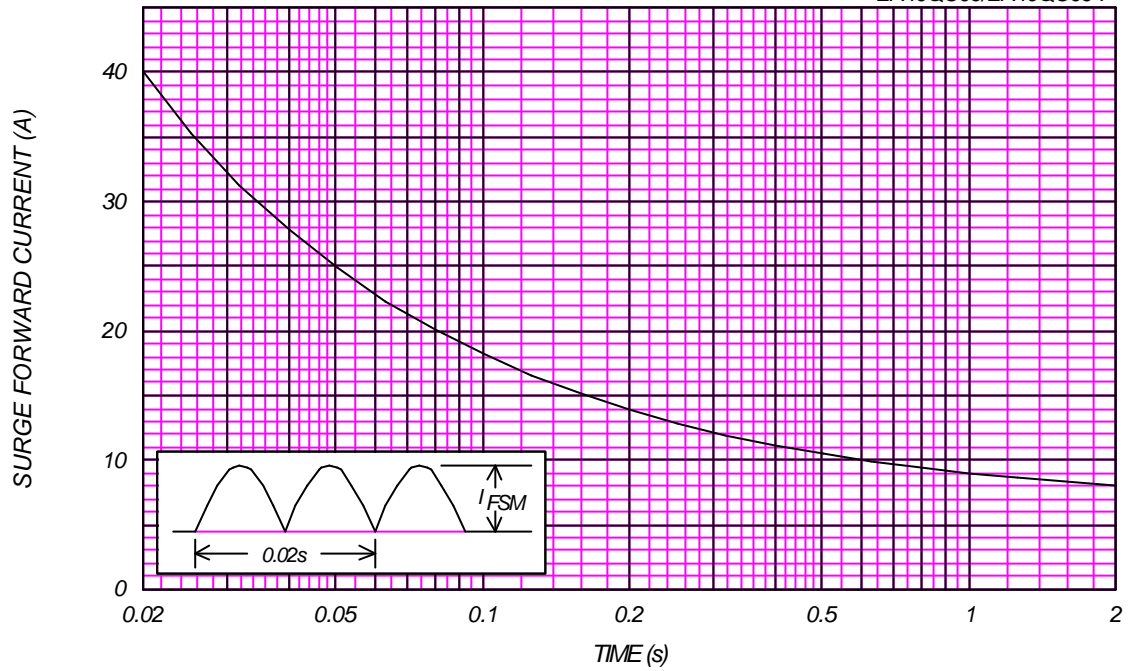
P.C. Board mounted (Print land=20x20mm)



SURGE CURRENT RATINGS

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

EA40QC09/EA40QC09-F



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

EA40QC09/EA40QC09-F (per Arm)

