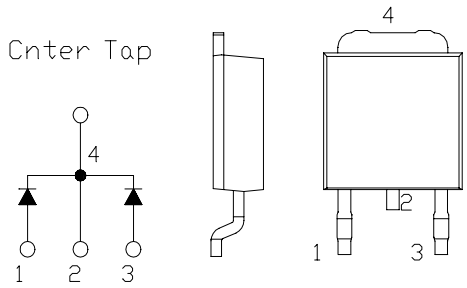
Nihon Inter Electronics Corporation

SBD Type : EA60QC09-F

OUTLINE DRAWING



FEATURES

* TO-252AA Case, Surface Mount Device
* Dual Diodes Cathode Common
* Low Forward Voltage drop
* Low Power Loss
* High Surge Capability
* 30 Volts thru 100 Volts Types Available
* Packaged in 16mm Tape and Reel

Maximum Ratings

Approx Net Weight:0.30g

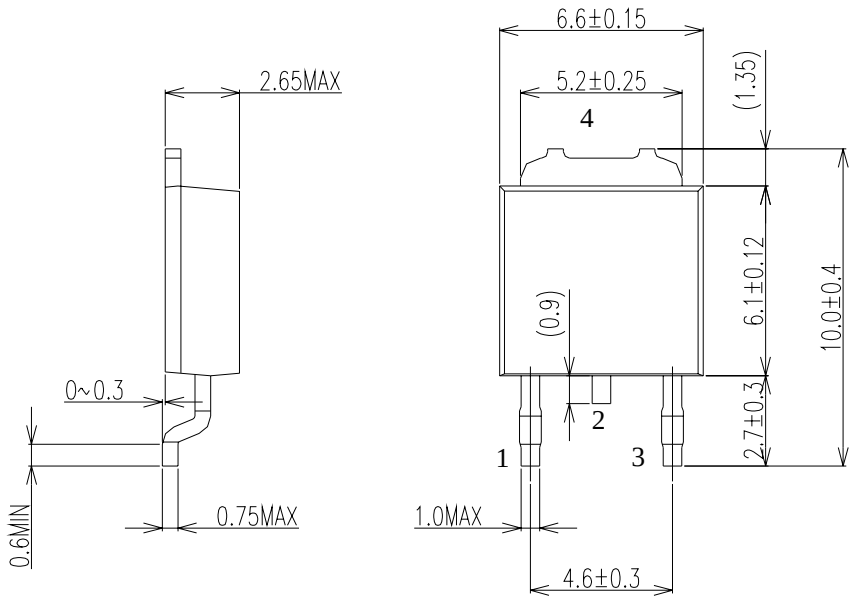
Rating		Symbol	EA60QC09-F			Unit
Repetitive Peak Reverse Voltage		V_{RRM}	90			V
Average Rectified Output Current	P.C.Board mounted *	I_O	1.6	Ta=37°C	50Hz Full Sine Wave Resistive Load	A
	-		6.0	Tc=122°C		
RMS Forward Current		$I_{F(RMS)}$	6.66			A
Surge Forward Current		I_{FSM}	45	50Hz Full Sine Wave,1cycle, Non-repetitive		A
Operating JunctionTemperature Range		Tjw	- 40 to + 150			°C
Storage Temperature Range		Tstg	- 40 to + 150			°C

Electrical • Thermal Characteristics

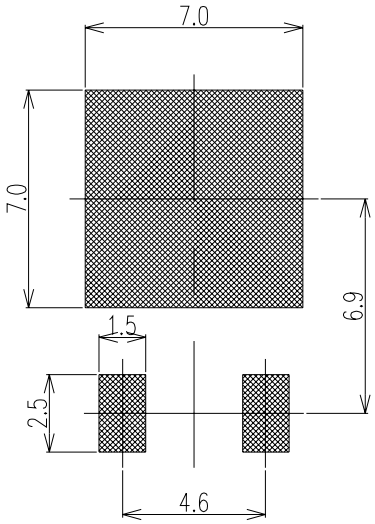
Characteristics		Symbol	Conditions	Min	Typ	Max	Unit
Peak Reverse Current		I_{RM}	Tj=25°C,V_{RM}=V_{RRM} per Arm	-	-	1.0	mA
Peak Forward Voltage		V_{FM}	Tj=25°C,I_{FM}= 3A per Arm	-	-	0.85	V
Thermal Resistance	Junction to Ambient	Rth(j-a)	P.C.Board mounted *	-	-	80	°C/W
	Junction to Case	Rth(j-c)	-	-	-	5	°C/W

* Print Land = 20x20 mm

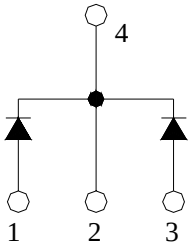
EA60QC09-F OUTLINE DRAWING (Dimensions in mm)



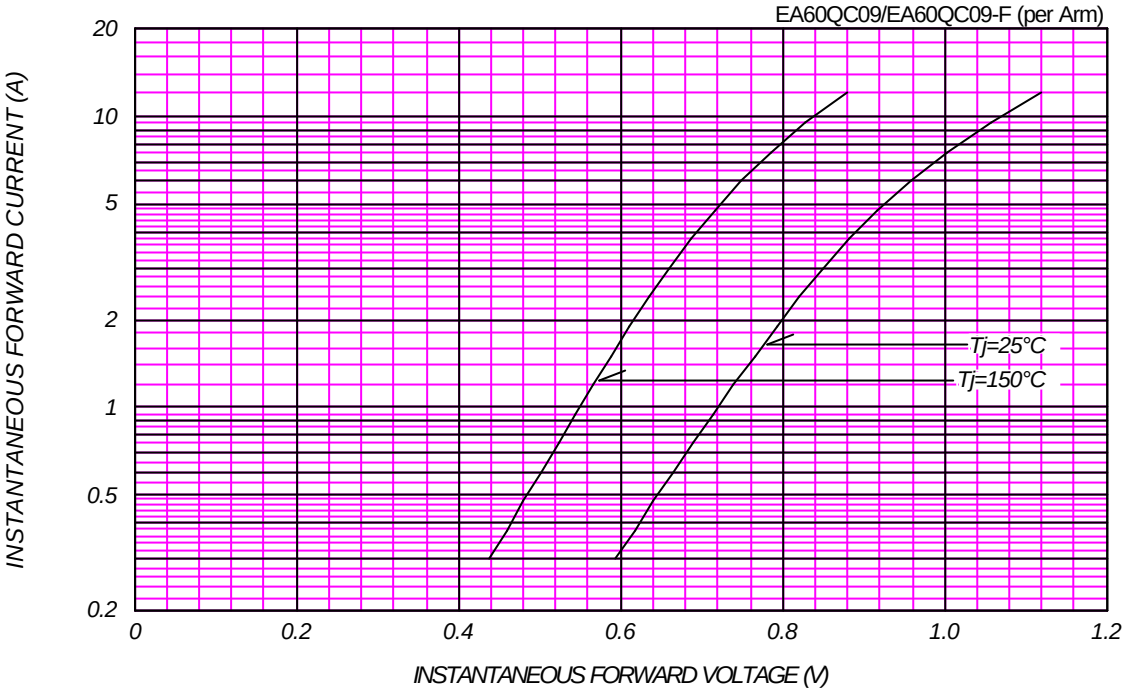
Soldering PAD

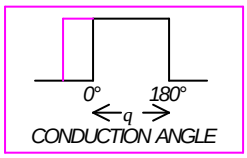


Center Tap

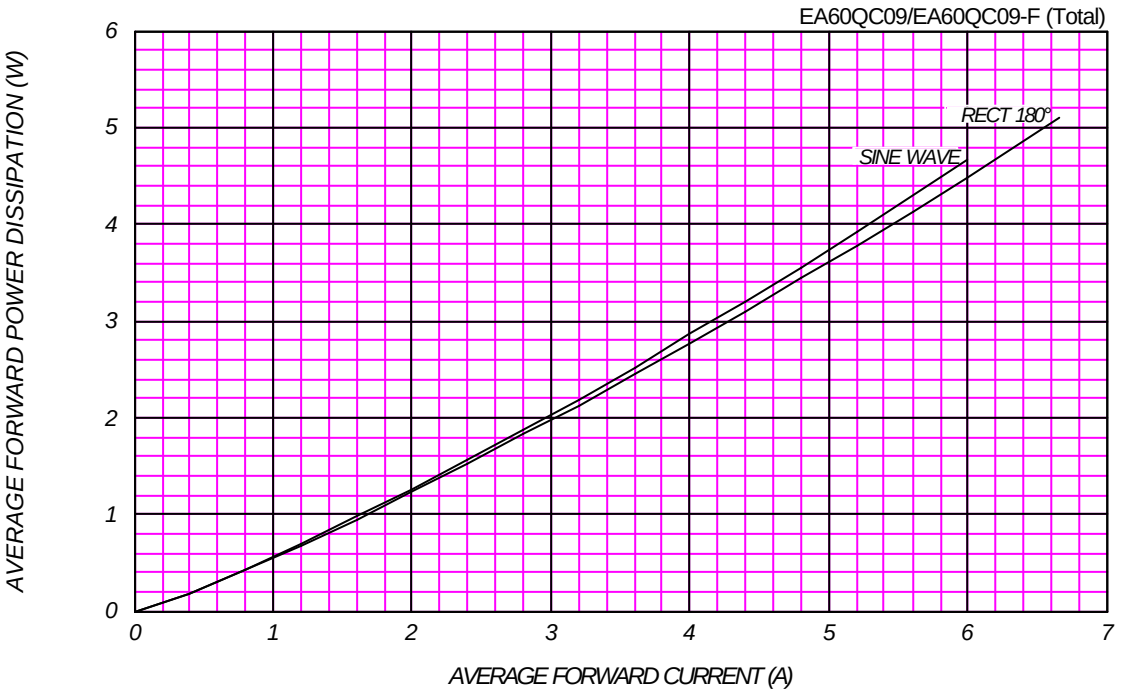


FORWARD CURRENT VS. VOLTAGE





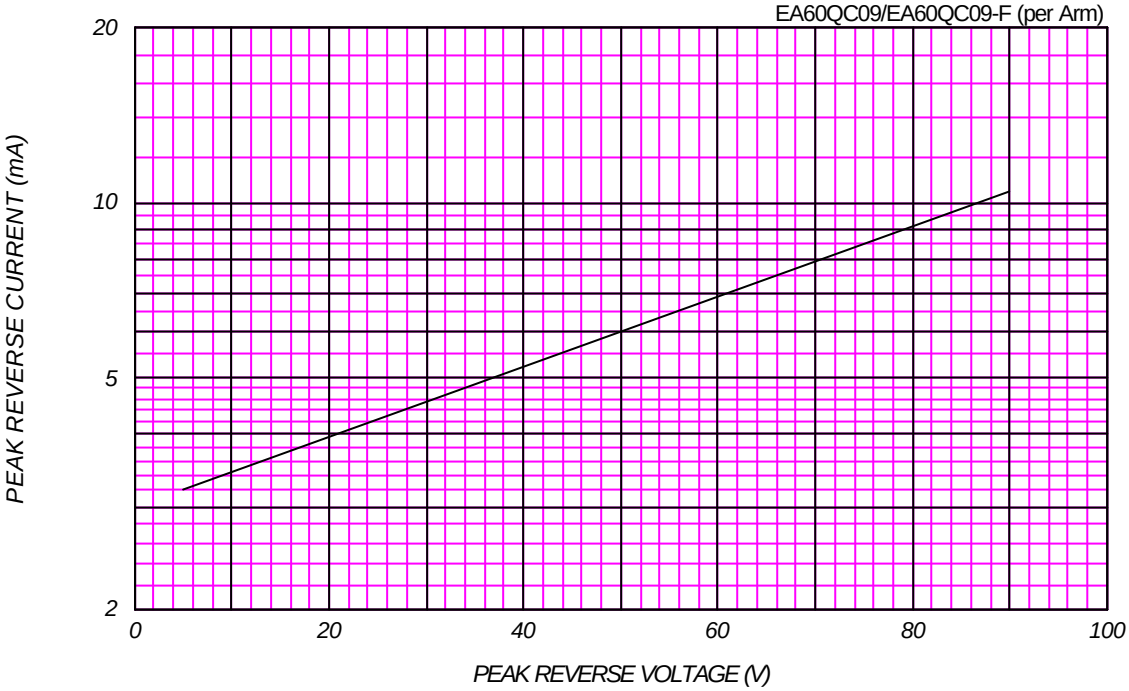
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

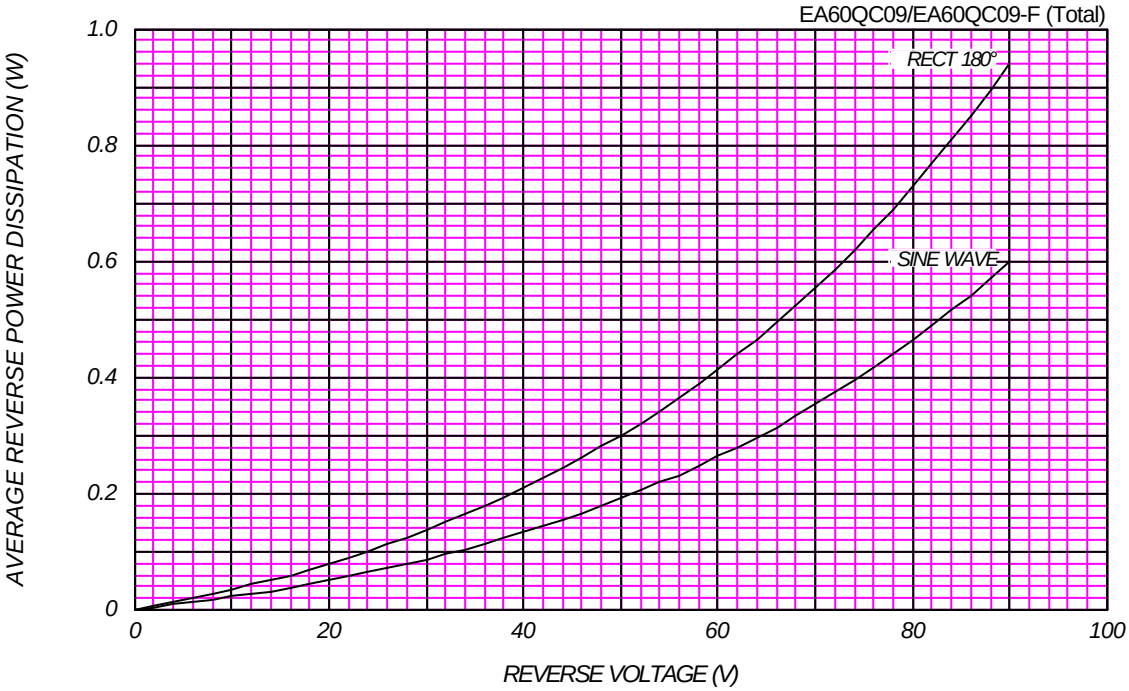
Tj= 150 °C

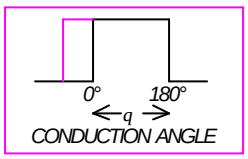
EA60QC09/EA60QC09-F (per Arm)



AVERAGE REVERSE POWER DISSIPATION

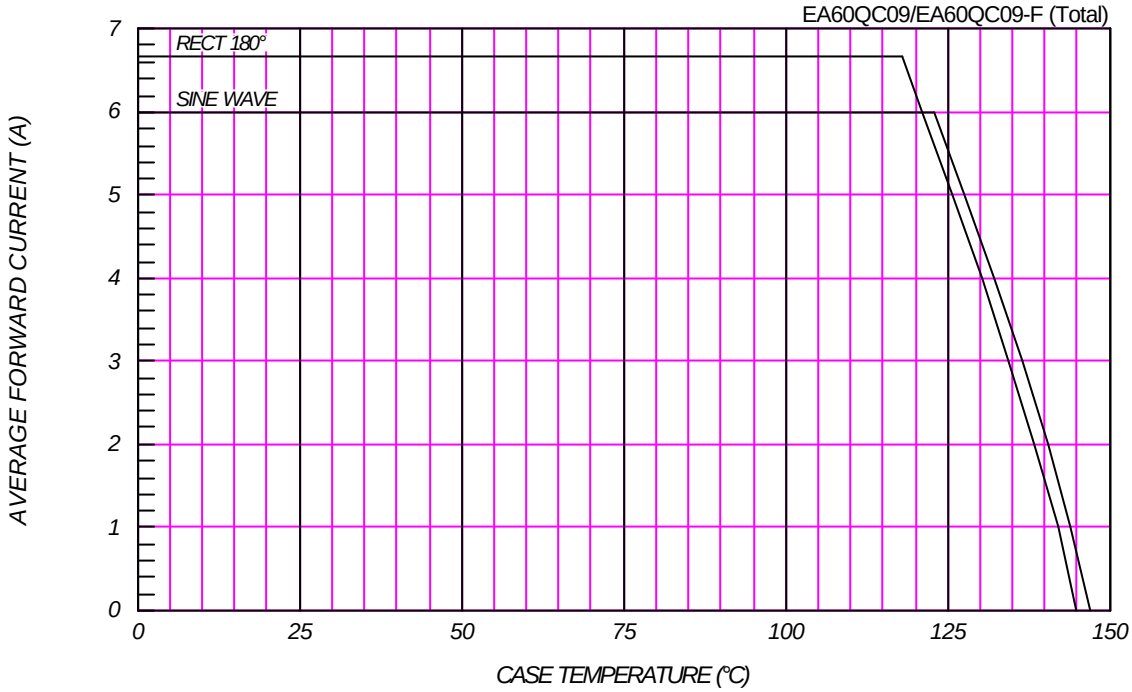
EA60QC09/EA60QC09-F (Total)

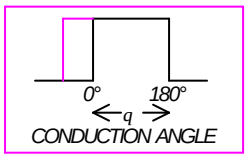




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

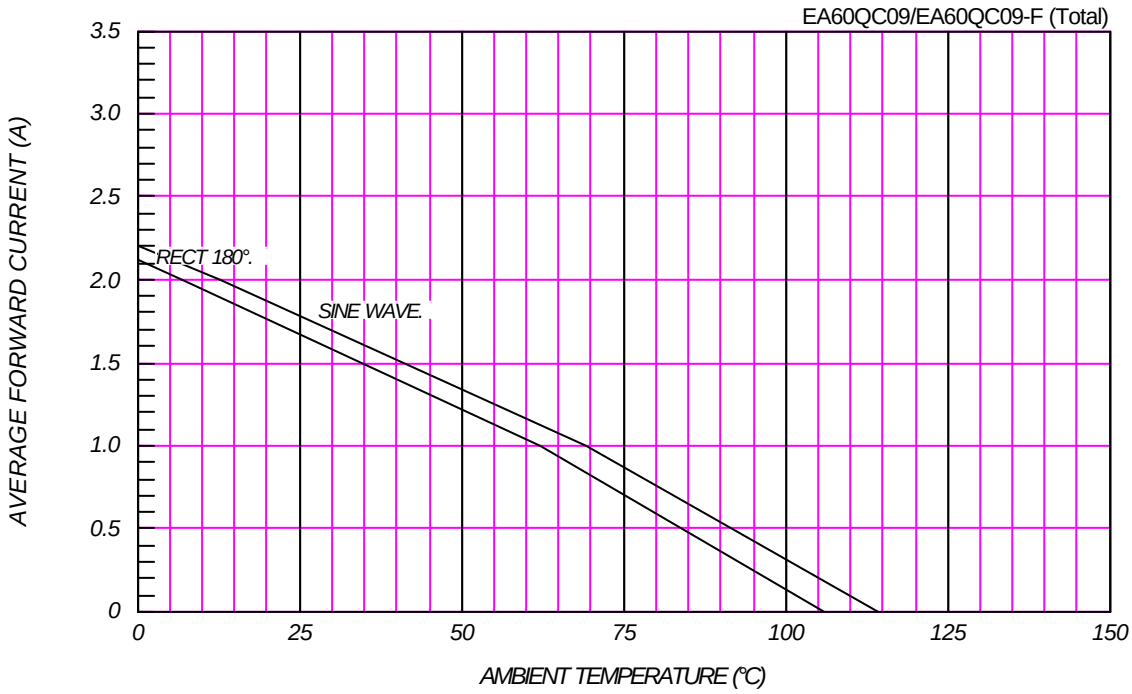
V_{RM}=100V





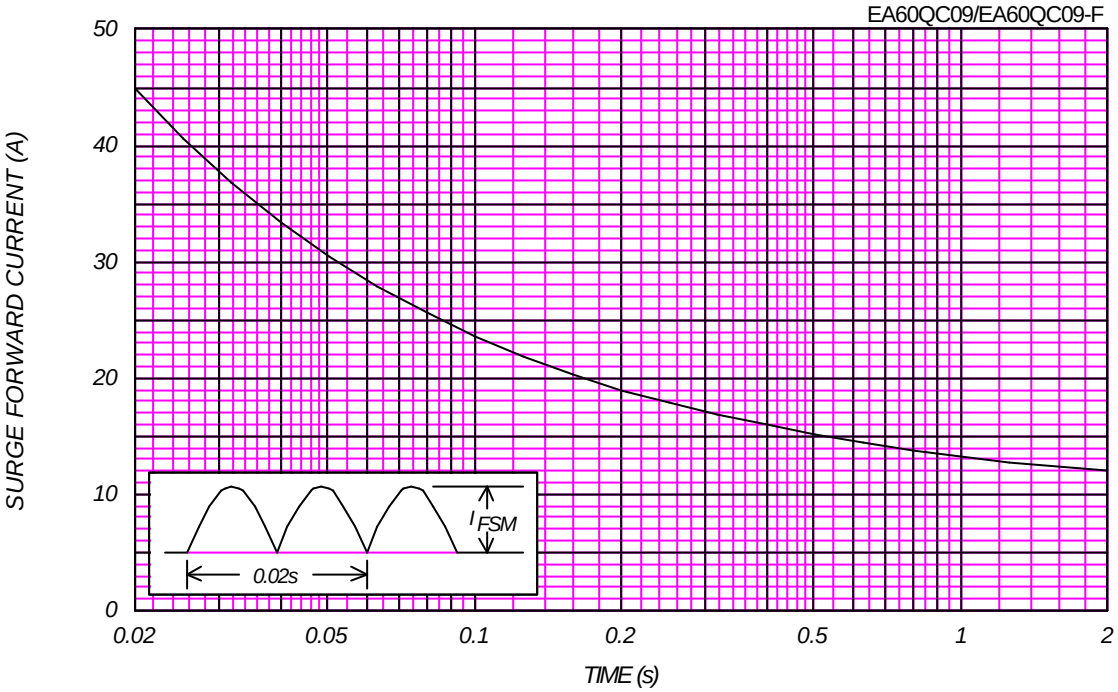
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

P.C. Board mounted (Print land=20×20mm)



SURGE CURRENT RATINGS

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



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

Tj=25° C,Vm=20mV$_{RMS}$,f=100kHz,Typical Value