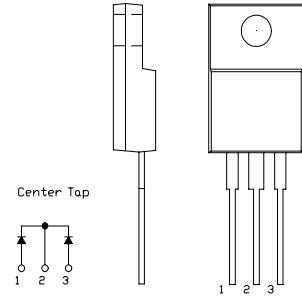


SBD Type : FCQ08A06

OUTLINE DRAWING

FEATURES

- *Similar to TO-220AB Case
- *Fully Molded Isolation
- *Dual Diodes – Cathode Common
- *Low Forward Voltage Drop
- *Low Power Loss,High Efficiency
- *High Surge Capability
- *Tj=150 °C operation
- *Wire-Bonded technology



Maximum Ratings

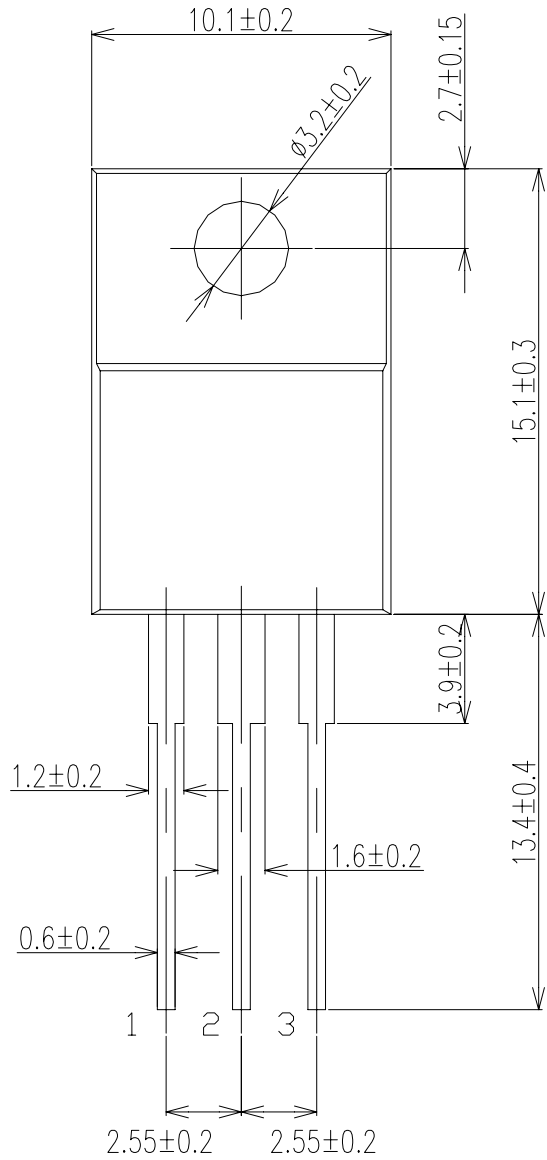
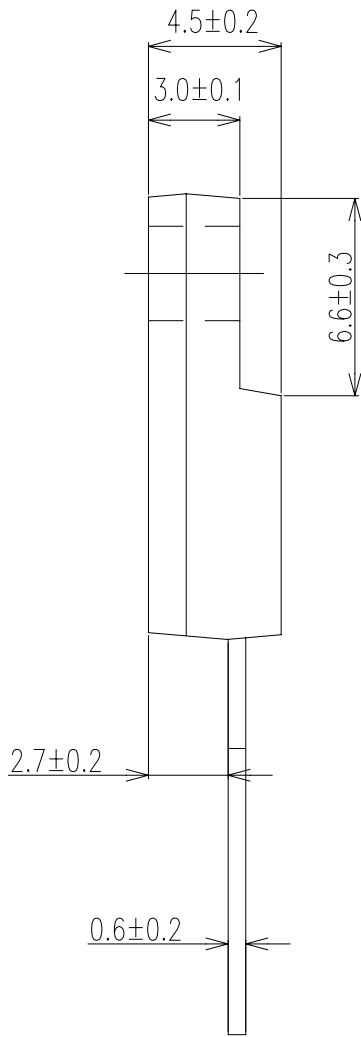
Approx Net Weight: 1.75g

Rating	Symbol	FCQ08A06			Unit
Repetitive Peak Reverse Voltage	V_{RRM}	60			V
Non-repetitive Peak Reverse Voltage	V_{RSM}	65			V
Average Rectified Output Current	I_O	8	$T_c=117^\circ\text{C}$	50 Hz Full Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	8.89			A
Surge Forward Current	I_{FSM}	75	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
Mounting torque	Ftor	recommended torque = 0.5			N•m

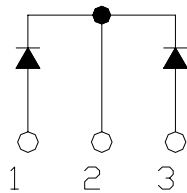
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j= 25^\circ\text{C}$, $V_{RM}= V_{RRM}$ per arm	-	-	3	mA
Peak Forward Voltage	V_{FM}	$T_j= 25^\circ\text{C}$, $I_{FM}= 4\text{ A}$ per arm	-	-	0.65	V
Thermal Resistance	Rth(j-c)	Junction to Case	-	-	3	°C /W
	Rth(c-f)	Cace to Fin	-	-	1.5	°C /W

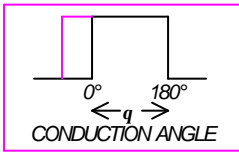
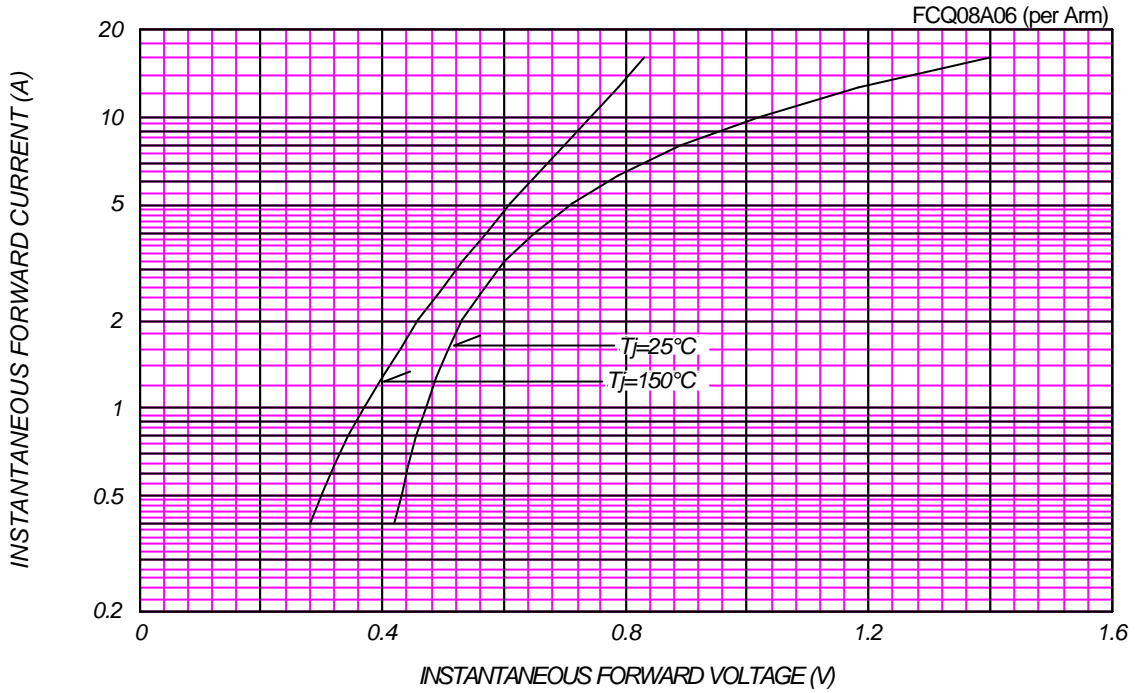
FCQ_A_ OUTLINE DRAWING (Dimensions in mm)



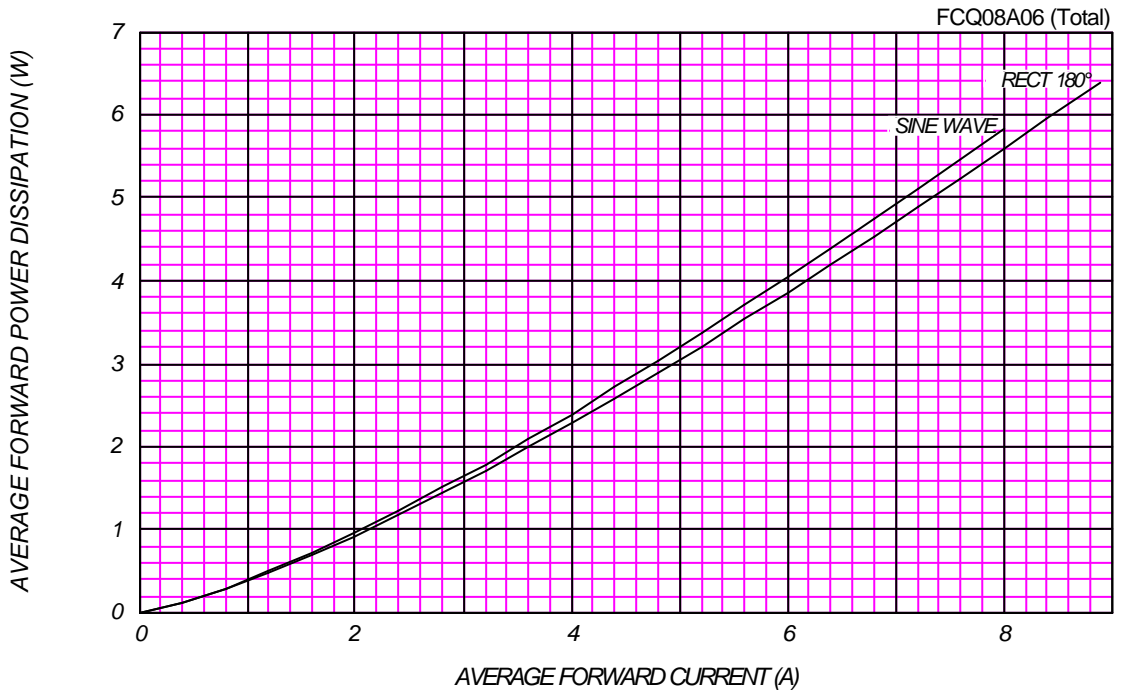
Center Tap



FORWARD CURRENT VS. VOLTAGE



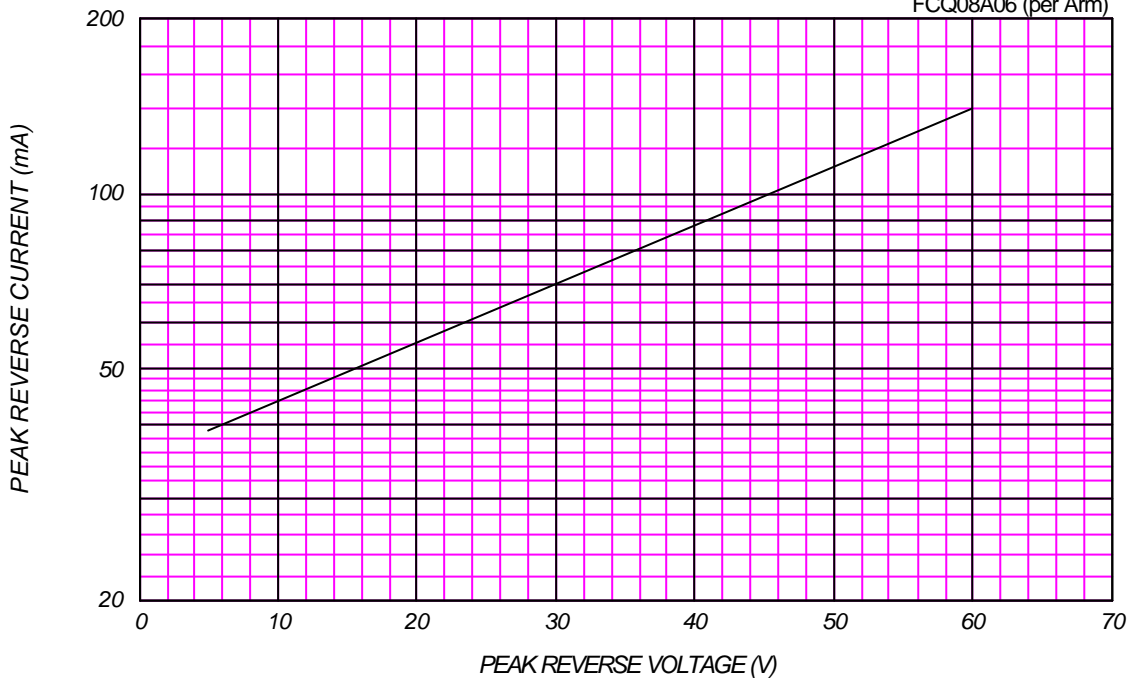
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

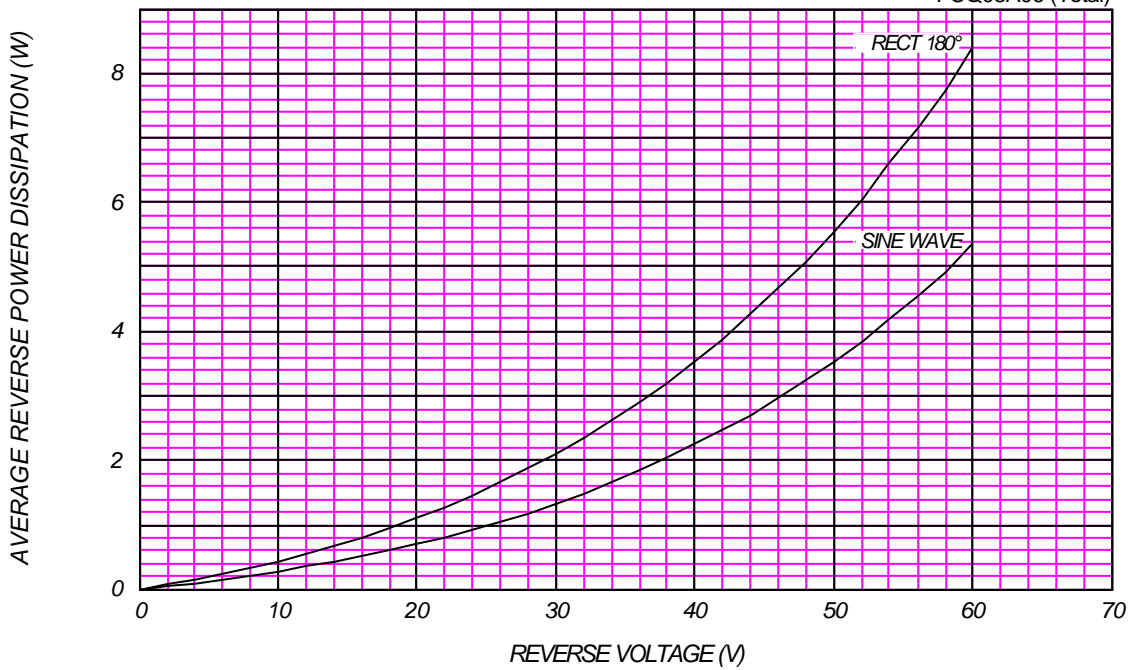
T_j = 150 °C

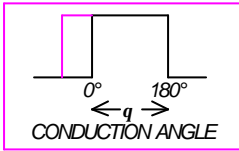
FCQ08A06 (per Arm)



AVERAGE REVERSE POWER DISSIPATION

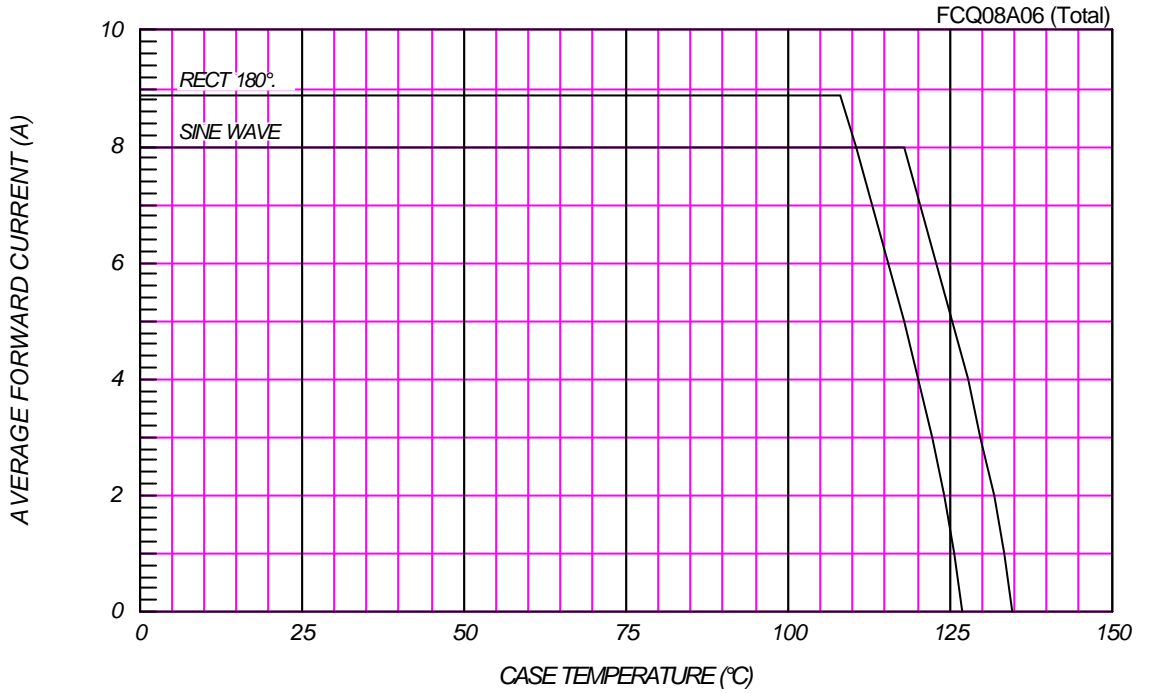
FCQ08A06 (Total)





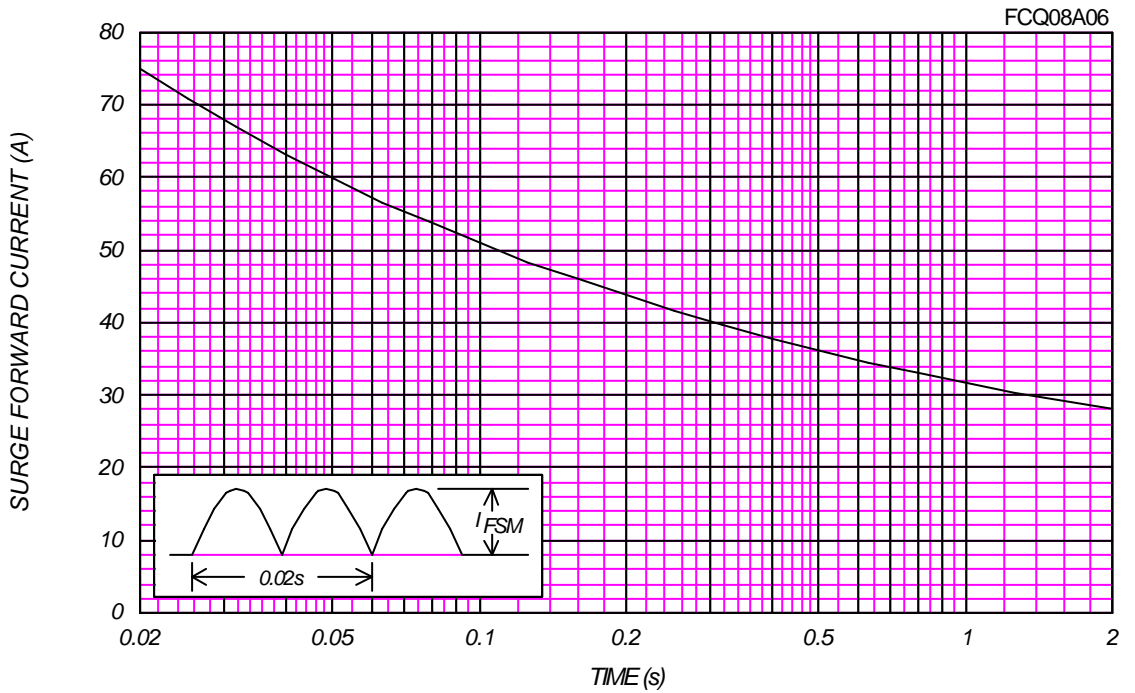
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=60\text{ V}$



SURGE CURRENT RATINGS

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



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

FCQ08A06 (per Arm)

