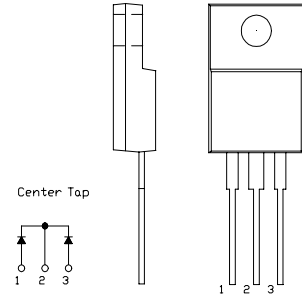


SBD Type : FCQ20A04

OUTLINE DRAWING

FEATURES

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



Maximum Ratings

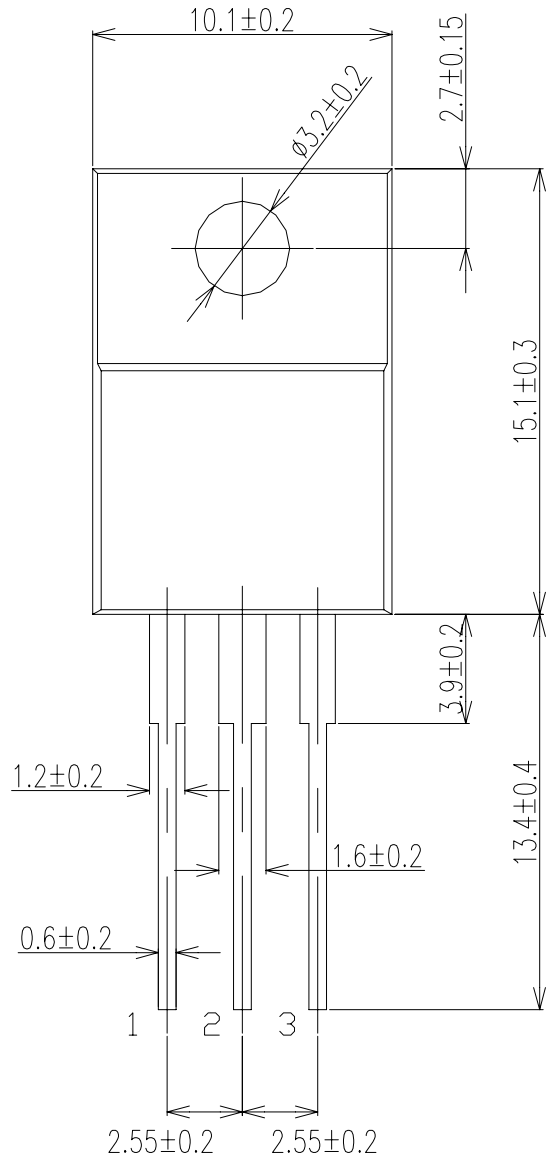
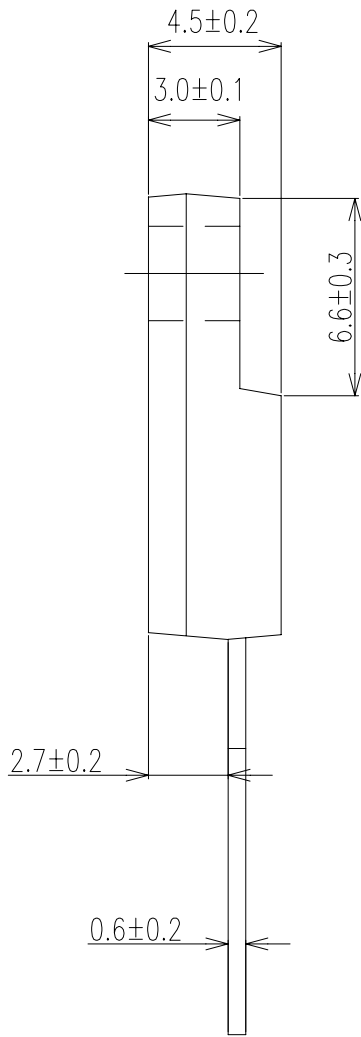
Approx Net Weight: 1.75g

Rating	Symbol	FCQ20A04		Unit
Repetitive Peak Reverse Voltage	V_{RRM}	40		V
Average Rectified Output Current	I_O	20	Tc=119°C 50 Hz Full Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	22.2		A
Surge Forward Current	I_{FSM}	180	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

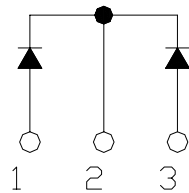
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	Tj= 25°C, $V_{RM}= V_{RRM}$ per arm	-	-	10	mA
Peak Forward Voltage	V_{FM}	Tj= 25°C, $I_{FM}= 10 A$ per arm	-	-	0.55	V
Thermal Resistance	Rth(j-c)	Junction to Case	-	-	1.5	°C/W
	Rth(c-f)	Cace to Fin	-	-	1.5	°C/W

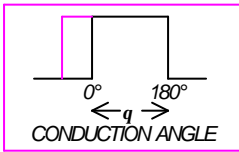
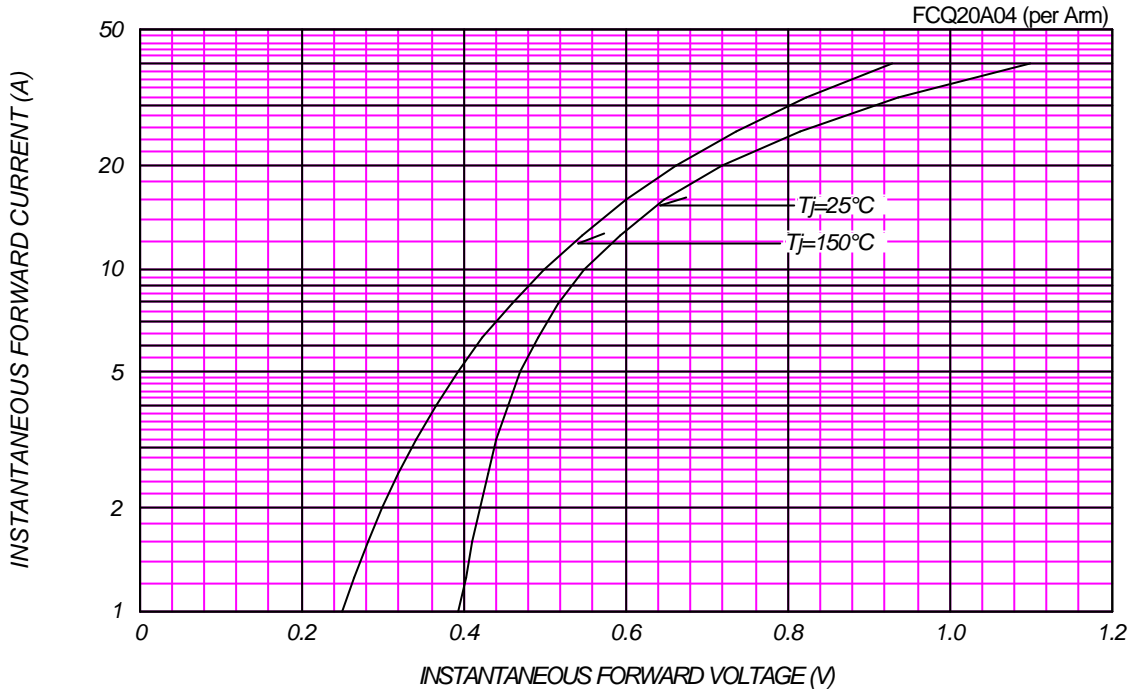
FCQ_A_ OUTLINE DRAWING (Dimensions in mm)



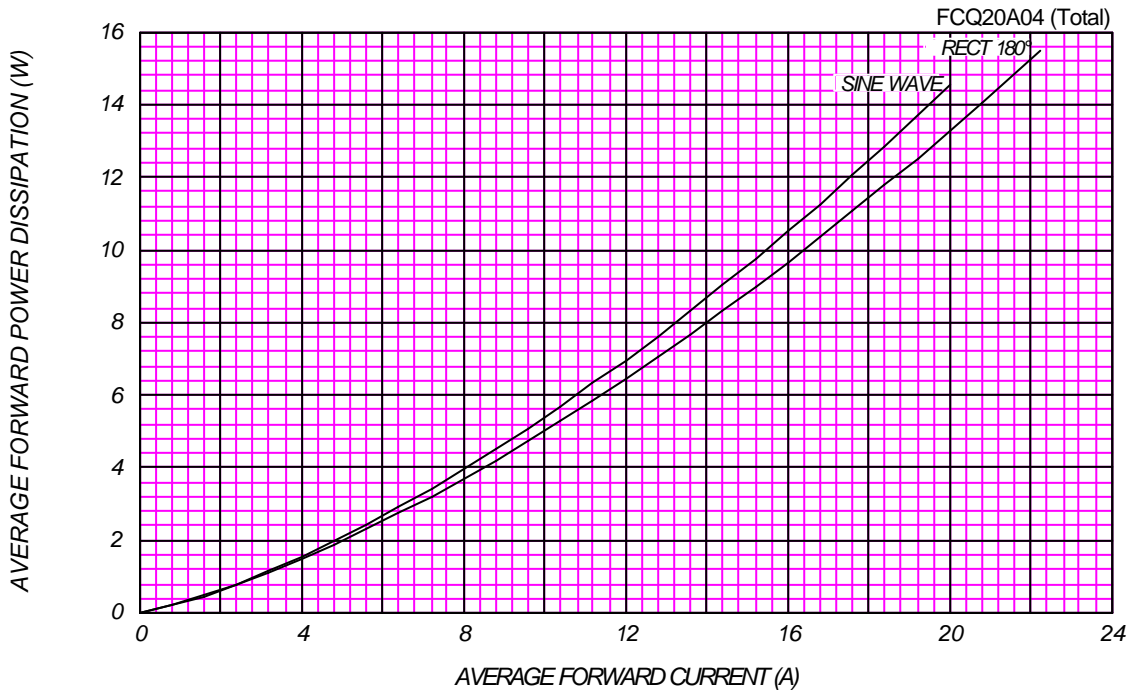
Center Tap



FORWARD CURRENT VS. VOLTAGE



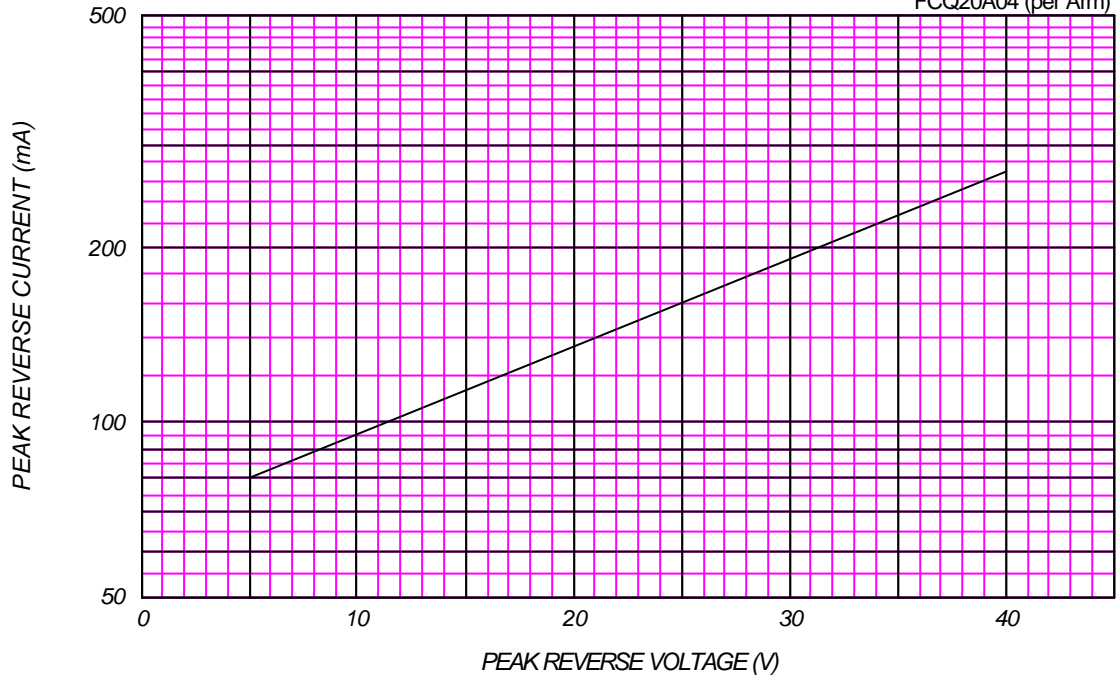
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

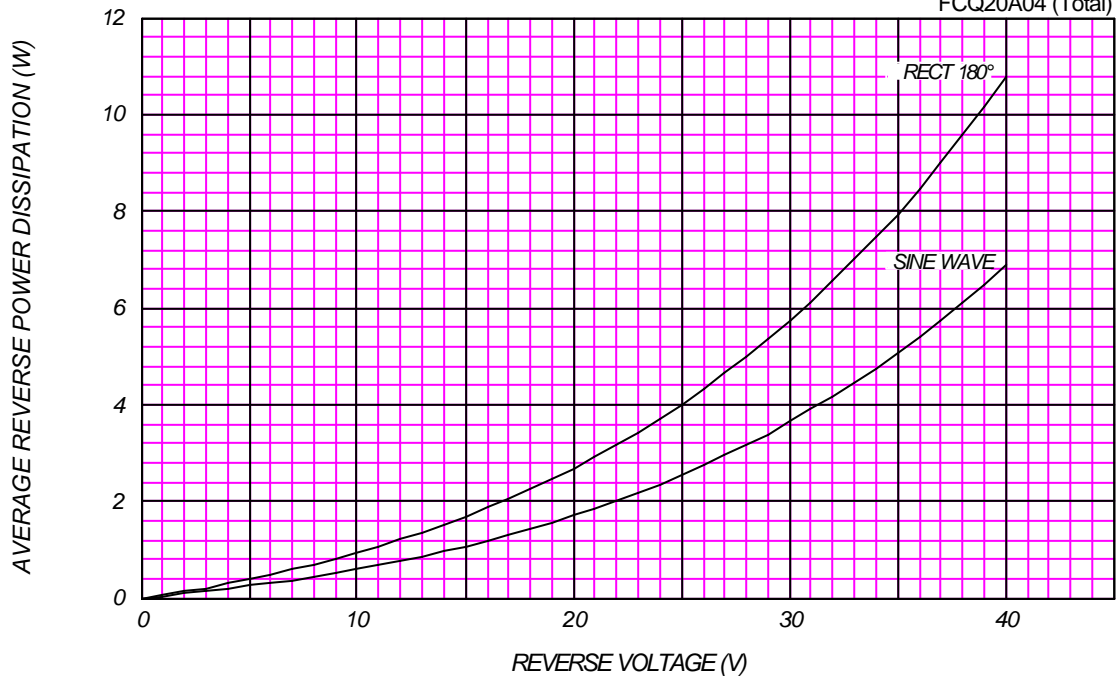
T_j = 150 °C

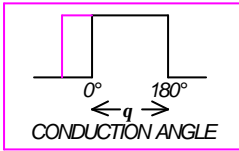
FCQ20A04 (per Arm)



AVERAGE REVERSE POWER DISSIPATION

FCQ20A04 (Total)

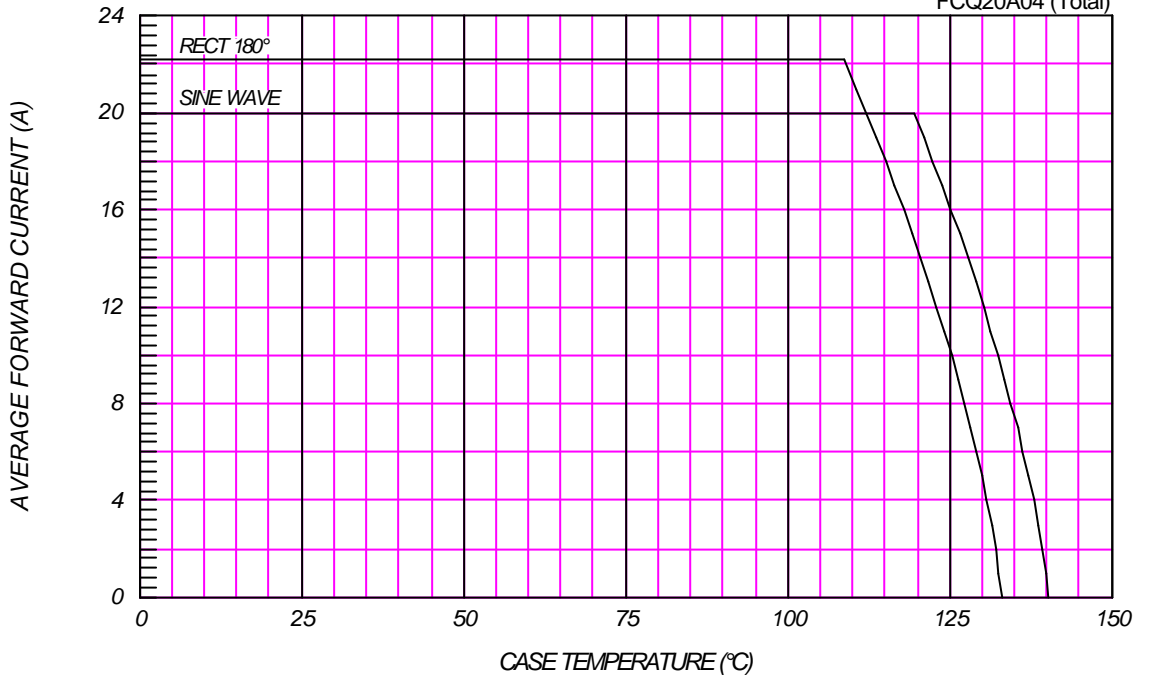




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=40\text{ V}$

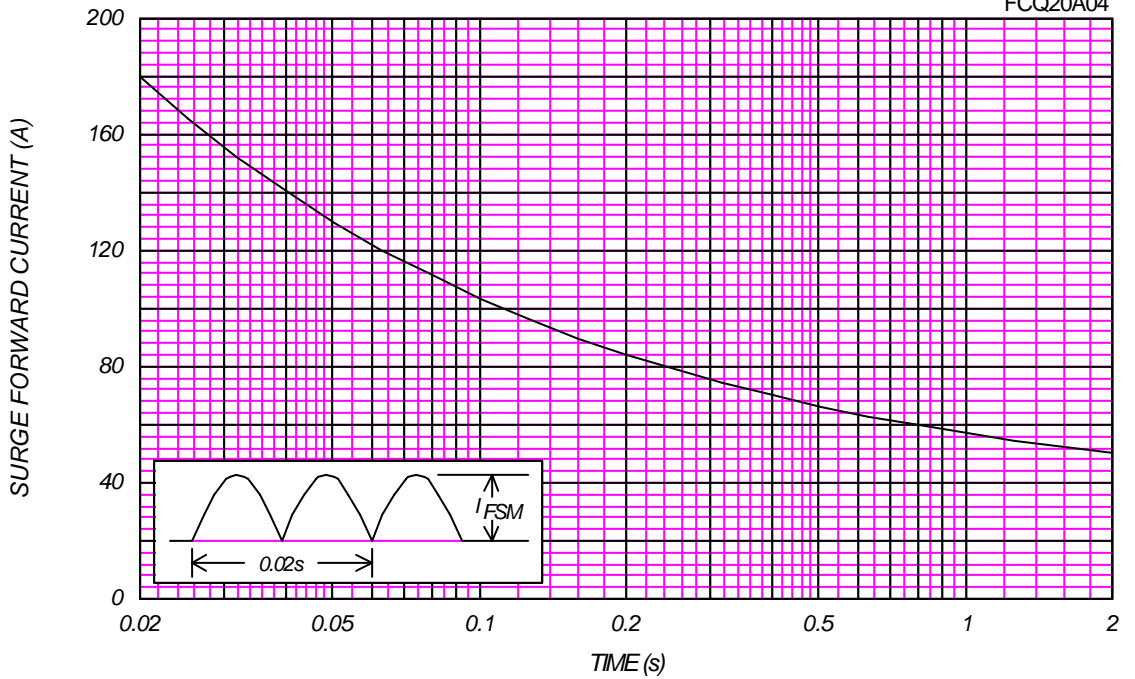
FCQ20A04 (Total)



SURGE CURRENT RATINGS

$f=50\text{ Hz}$, Sine Wave, Non-Repetitive, No Load

FCQ20A04



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

FCQ20A04 (per Arm)

