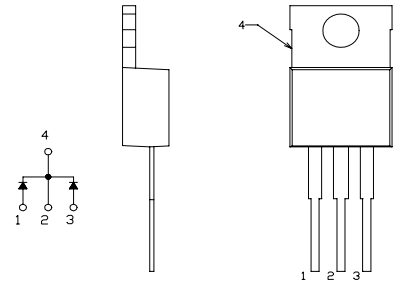


SBD Type : GCQ20A06

OUTLINE DRAWING

FEATURES

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



Maximum Ratings

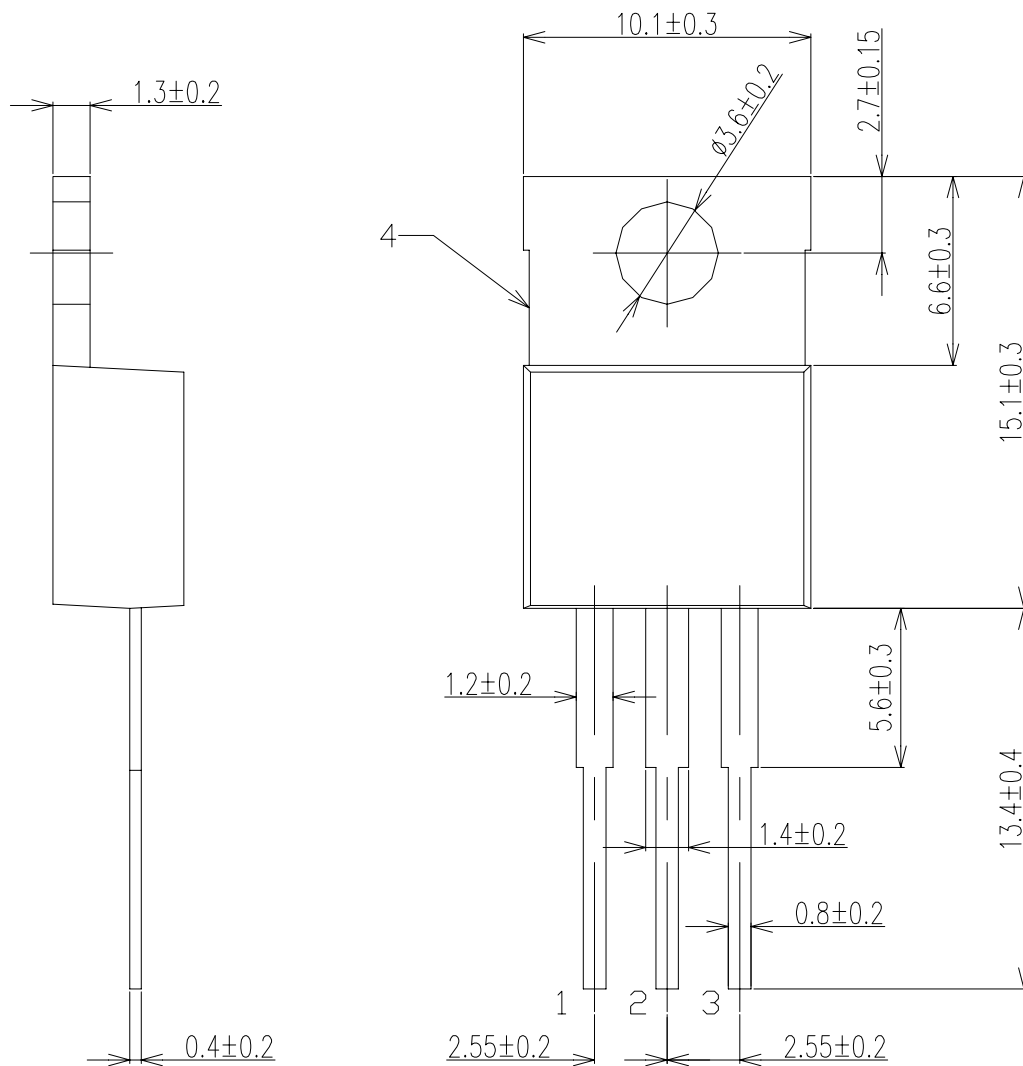
Approx Net Weight: 1.9g

Rating	Symbol	GCQ20A06			Unit
Repetitive Peak Reverse Voltage	V _{RRM}	60			V
Average Rectified Output Current	I _O	20	Tc=111℃	50 Hz Full Sine Wave Resistive Load	A
RMS Forward Current	I _{F(RMS)}	22.2			A
Surge Forward Current	I _{FSM}	150	50Hz Full Sine Wave ,1cycle Non-repetitive		A
Operating JunctionTemperature Range	T _{jw}	-40 to +150			℃
Storage Temperature Range	T _{stg}	-40 to +150			℃
Mounting torque	F _{tor}	recommended torque = 0.5			N•m

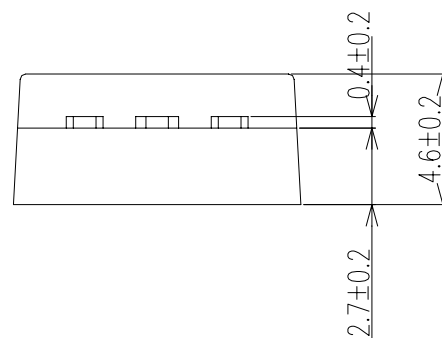
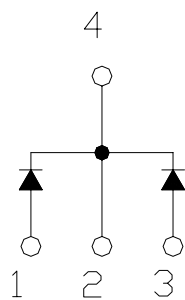
Electrical • Thermal Characteristics

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	-	-	0.65	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	1.5	°C /W

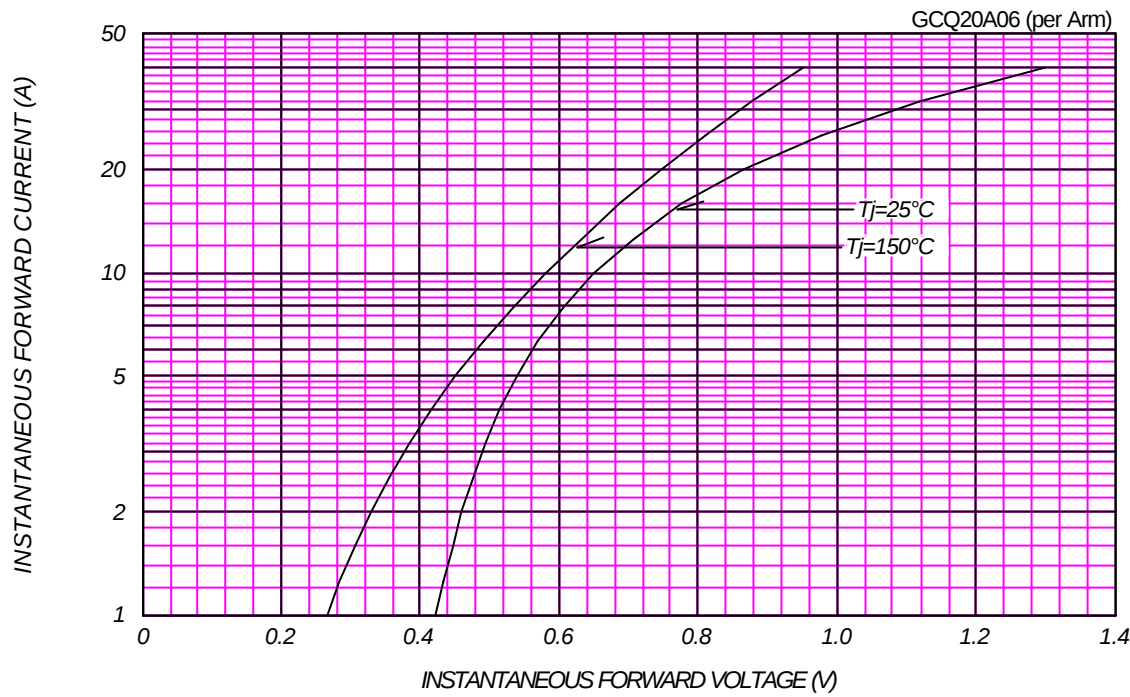
GCQ_A_ OUTLINE DRAWING (Dimensions in mm)



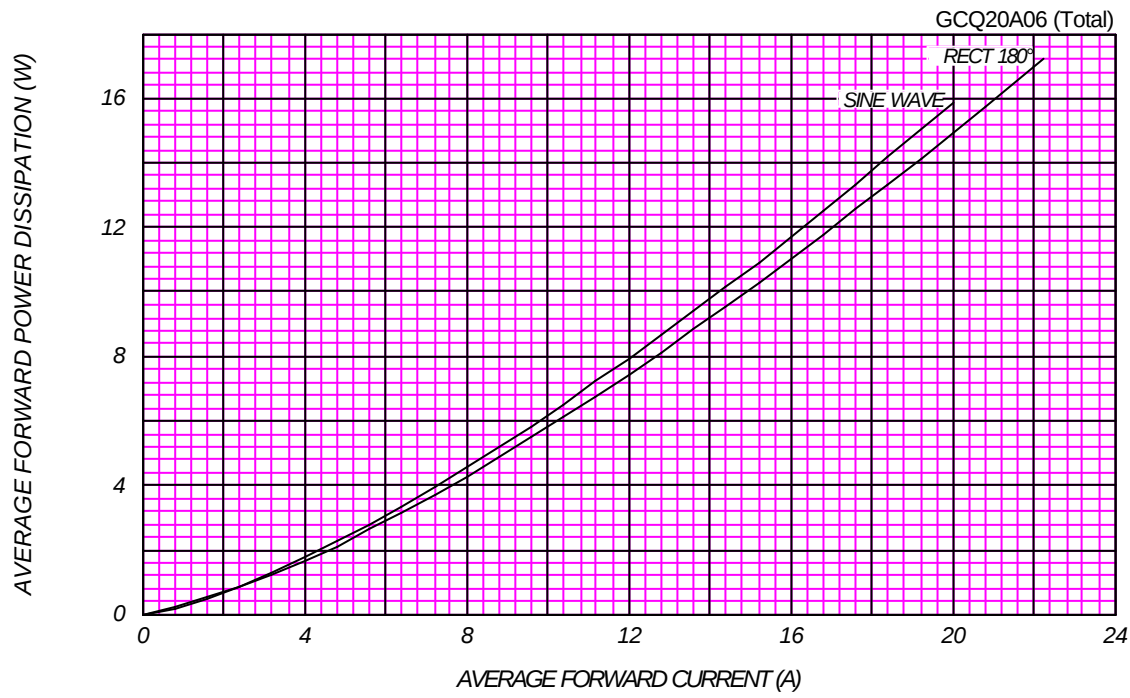
Center Tap



FORWARD CURRENT VS. VOLTAGE



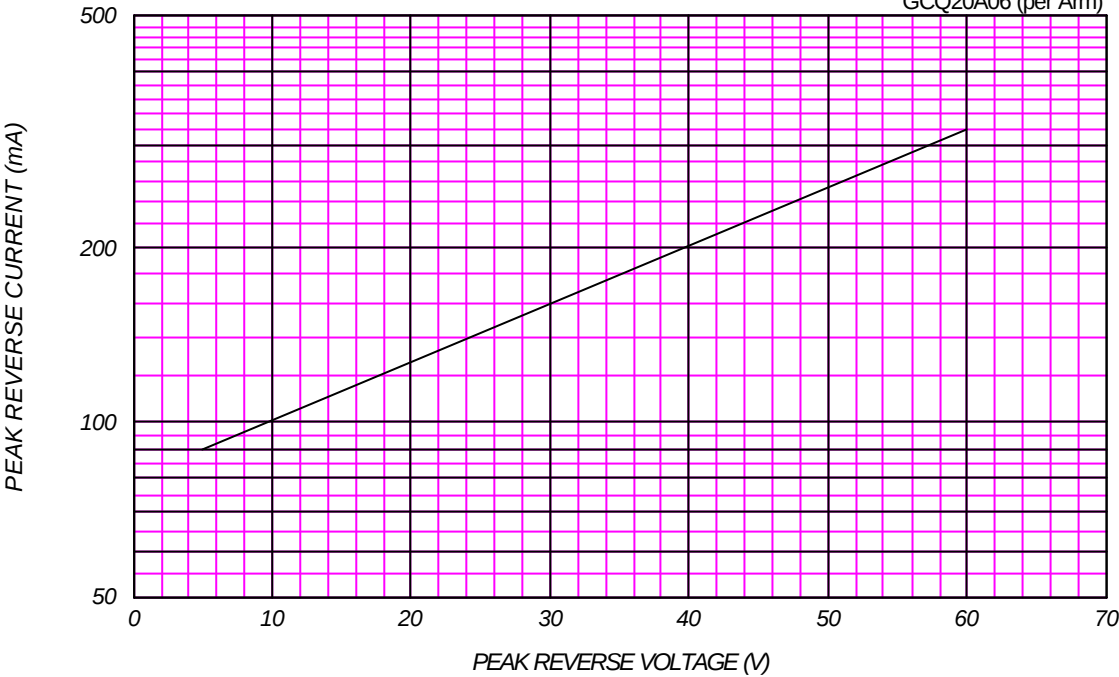
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

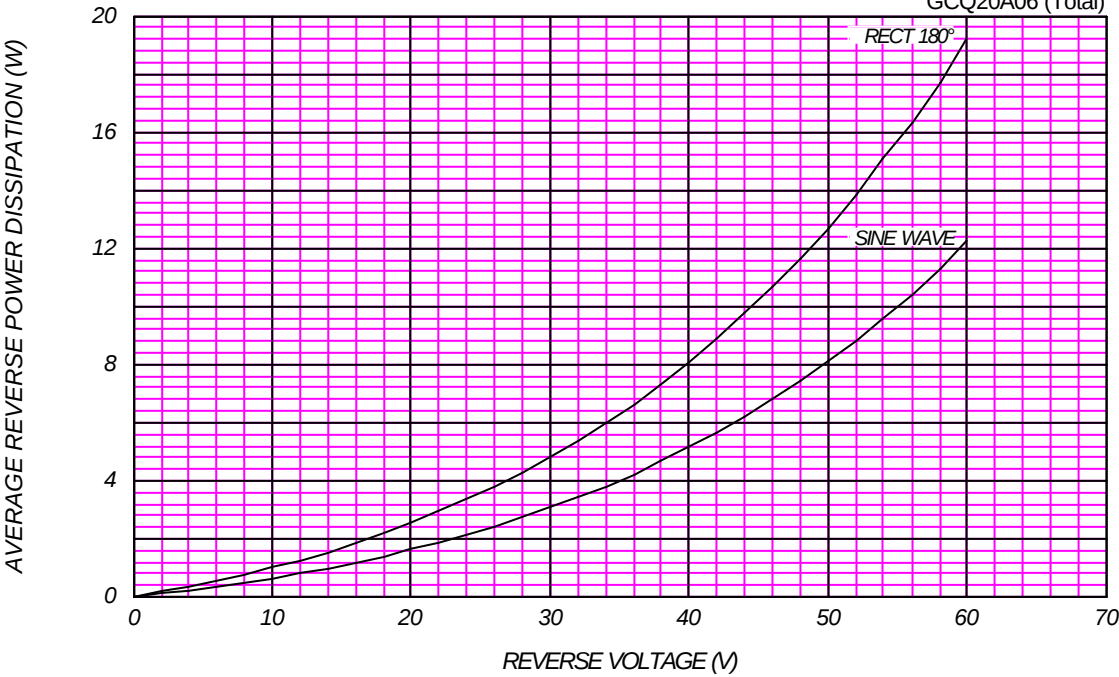
Tj= 150 °C

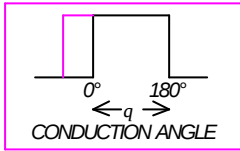
GCQ20A06 (per Arm)



AVERAGE REVERSE POWER DISSIPATION

GCQ20A06 (Total)

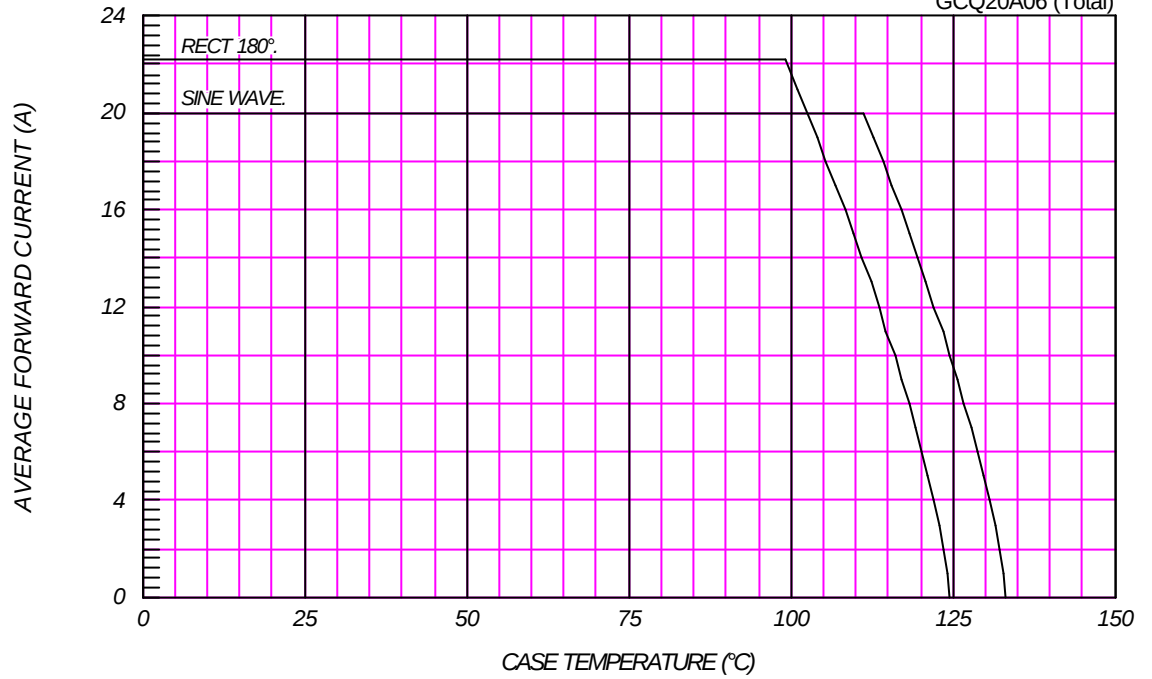




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=60V$

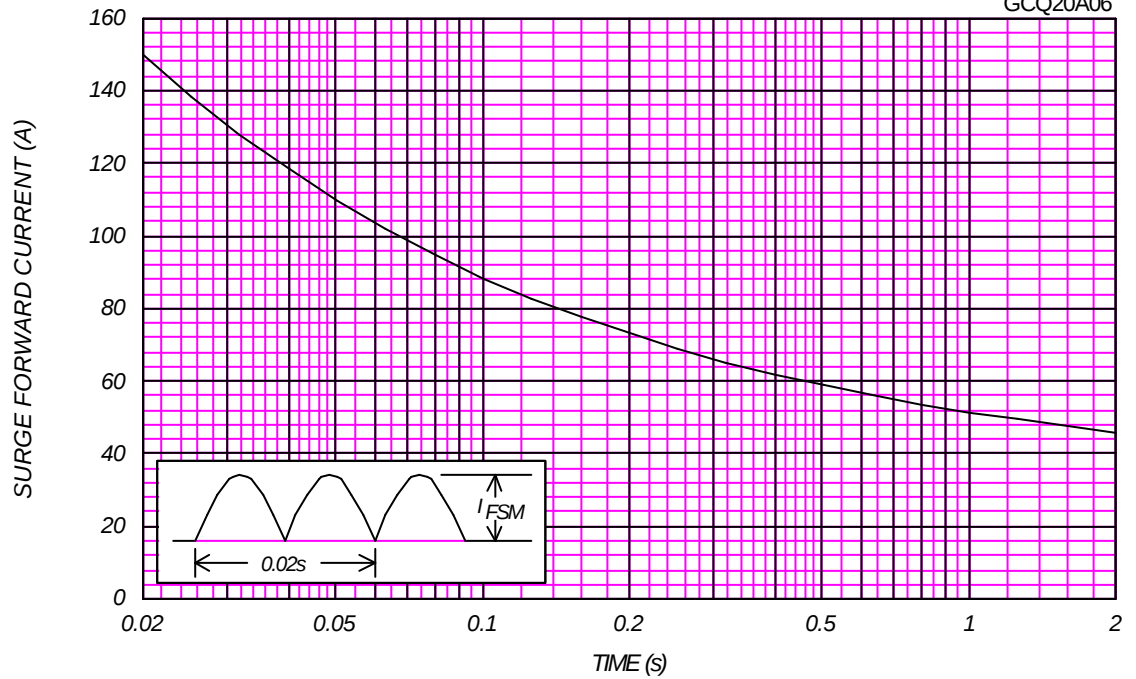
GCQ20A06 (Total)



SURGE CURRENT RATINGS

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

GCQ20A06



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

GCQ20A06 (per Arm)

