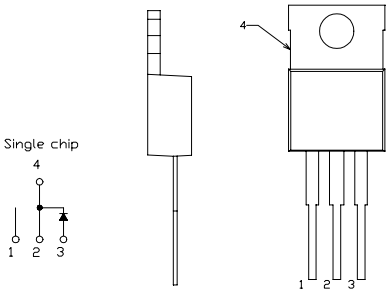


S B D T y p e : GSQ10A04B

OUTLINE DRAWING

FEATURES

- *Similar to TO-220AC Case
- *Low Forward Voltage Drop
- *Low Power Loss,High Efficiency
- *High Surge Capability
- *Tj=150 °C operation



Maximum Ratings

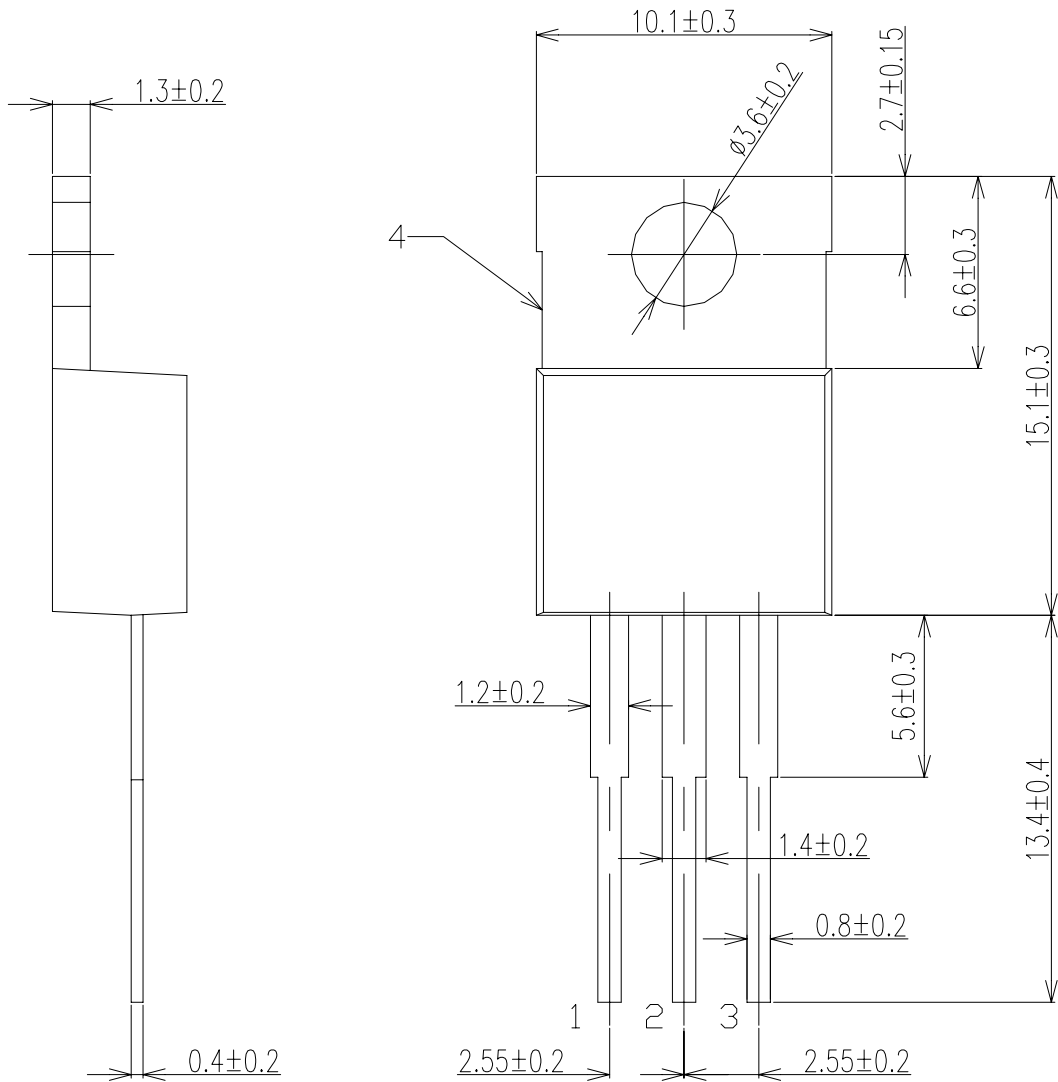
Approx Net Weight: 1.9g

Rating	Symbol	GSQ10A04B			Unit
Repetitive Peak Reverse Voltage	V _{RRM}	40			V
Non-repetitive Peak Reverse Voltage	V _{RSM}	45			V
Average Rectified Output Current	I _O	10	Tc=119°C	50 Hz half Sine Wave Resistive Load	A
RMS Forward Current	I _{F(RMS)}	15.7			A
Surge Forward Current	I _{FSM}	180	50Hz Half 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	F _{tor}	recommended torque = 0.5			N•m

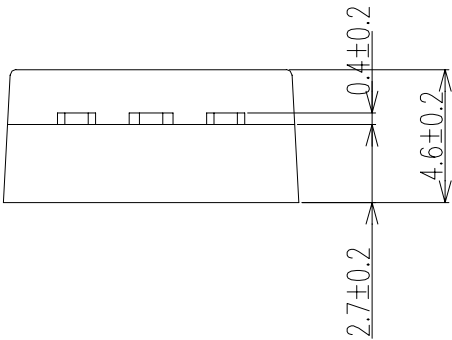
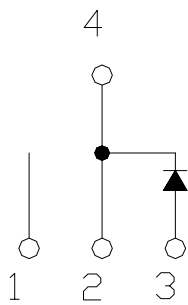
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I _{RM}	Tj= 25°C, V _{RM} = V _{RRM}	-	-	10	mA
Peak Forward Voltage	V _{FM}	Tj= 25°C, I _{FM} = 10 A	-	-	0.59	V
Thermal Resistance	Rth(j-c)	Junction to Case	-	-	3	°C /W

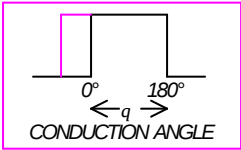
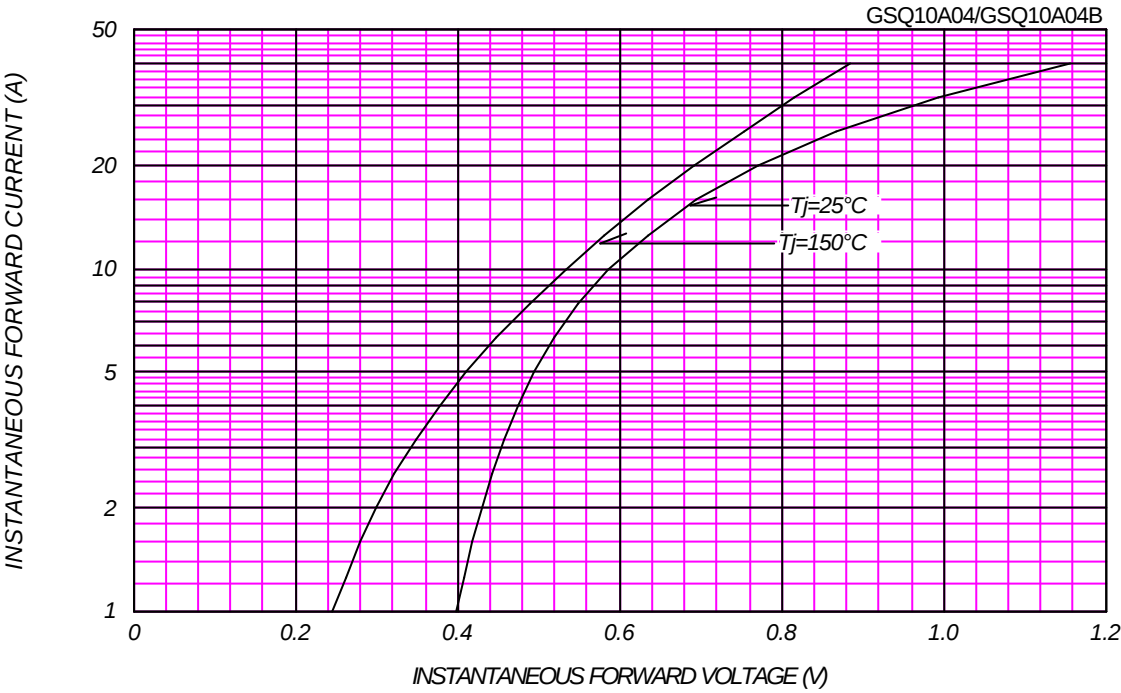
GSQ_B_ OUTLINE DRAWING (Dimensions in mm)



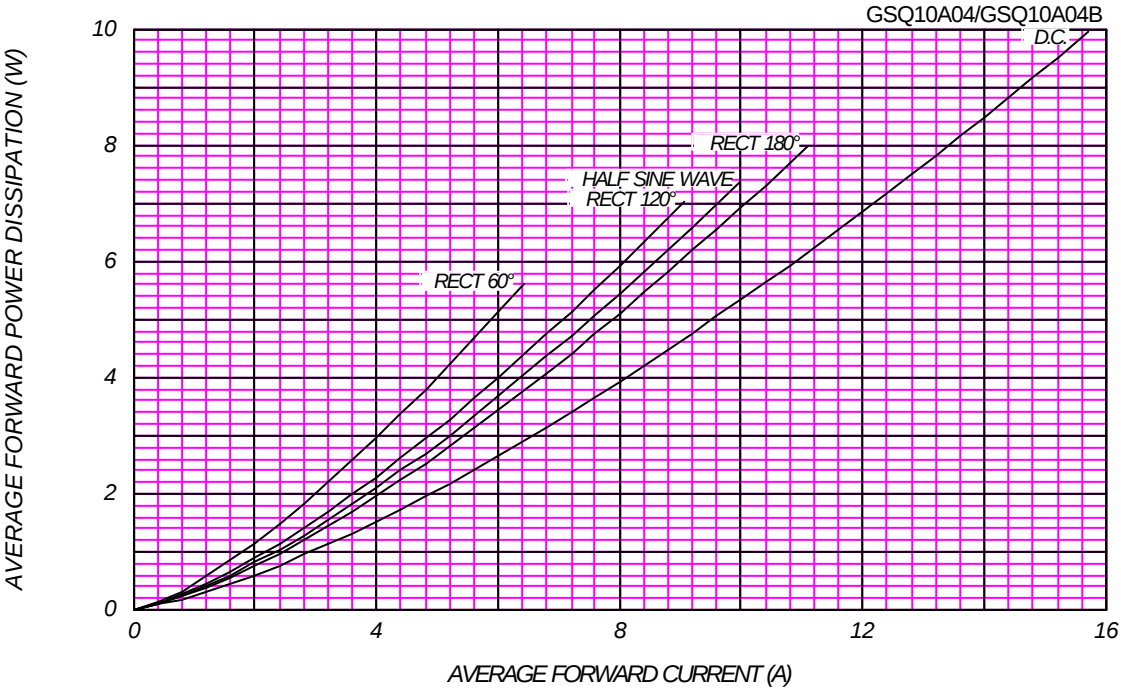
Single chip



FORWARD CURRENT VS. VOLTAGE



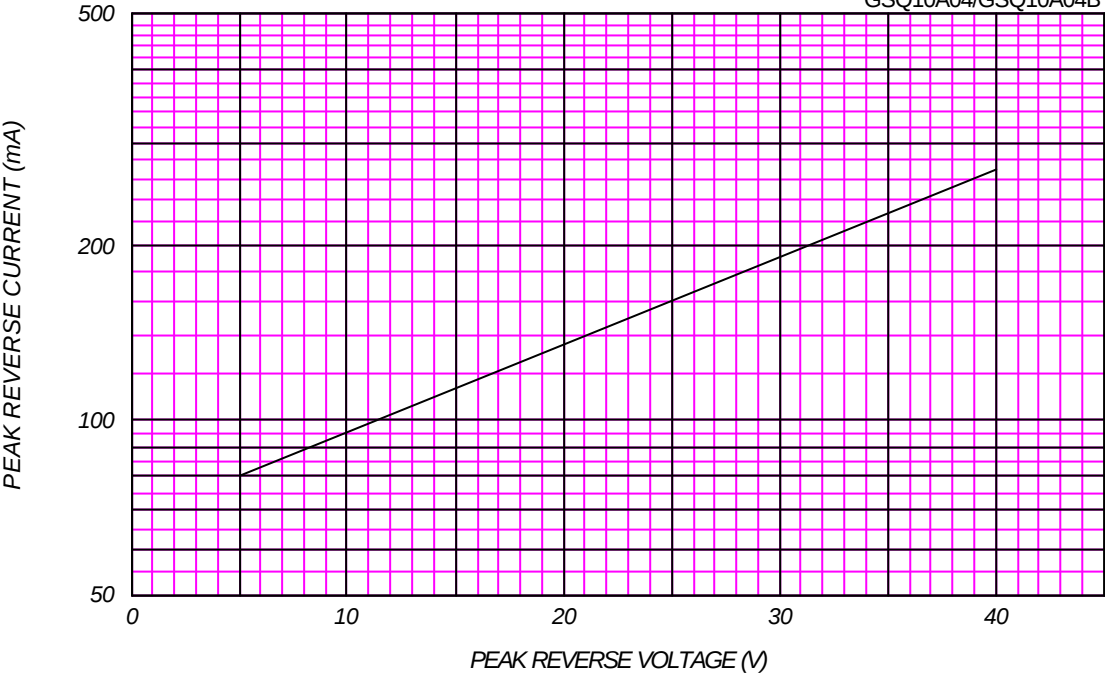
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

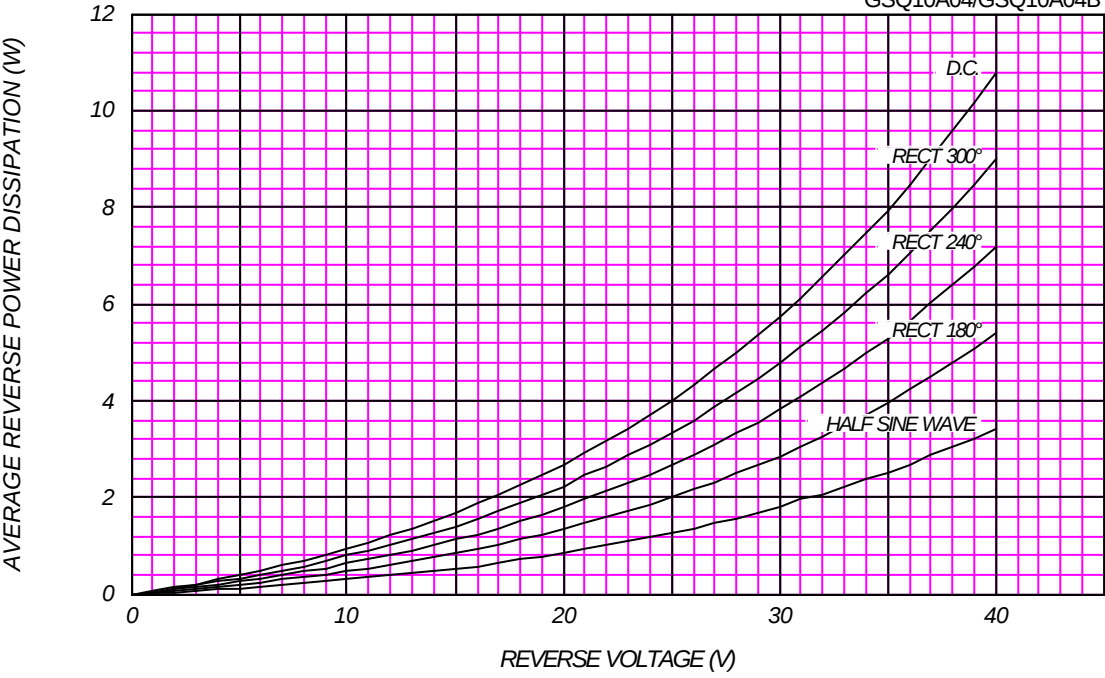
T_j= 150 °C

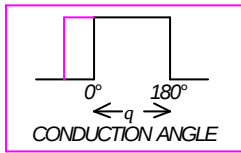
GSQ10A04/GSQ10A04B



AVERAGE REVERSE POWER DISSIPATION

GSQ10A04/GSQ10A04B

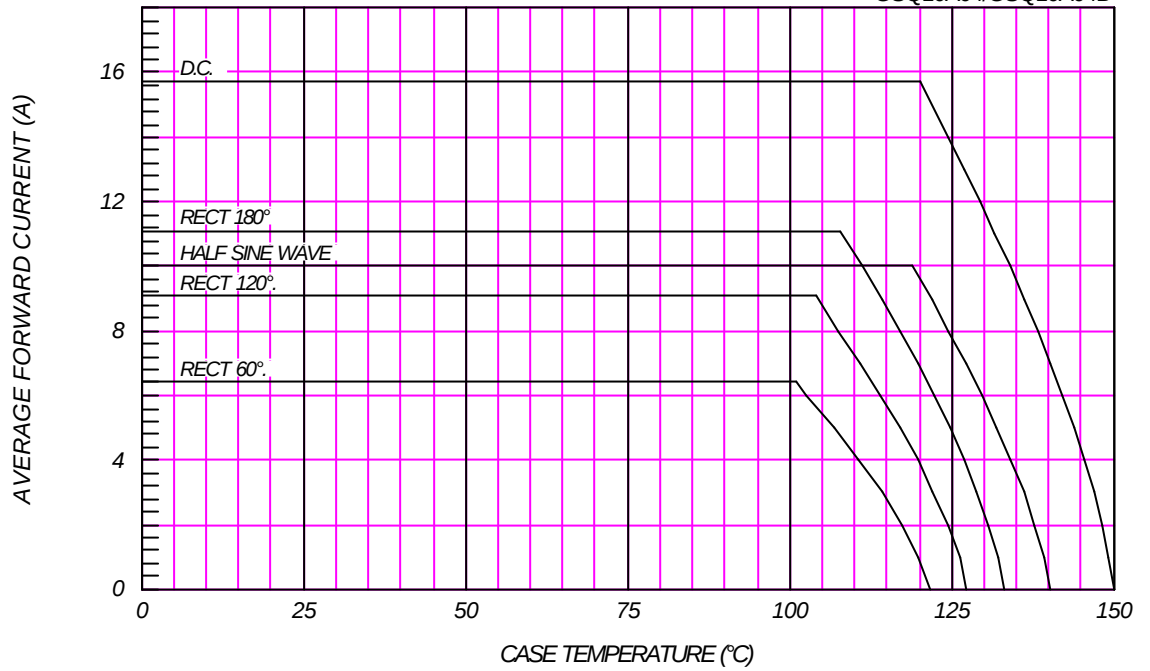




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=40V$

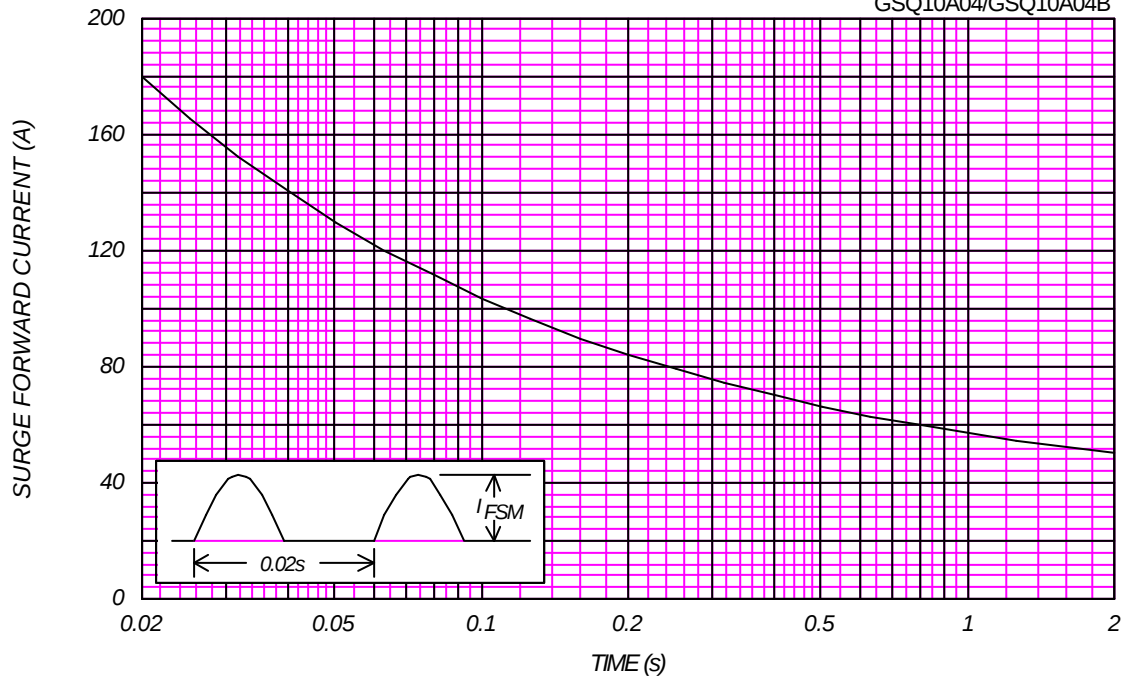
GSQ10A04/GSQ10A04B



SURGE CURRENT RATINGS

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

GSQ10A04/GSQ10A04B



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

GSQ10A04/GSQ10A04B

