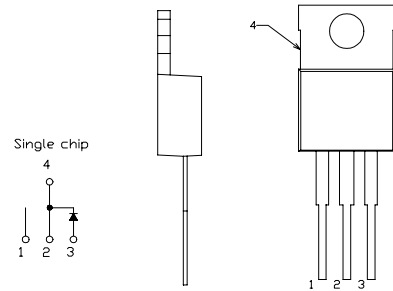


SBD Type : GSQ10A04B

OUTLINE DRAWING

FEATURES

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



Maximum Ratings

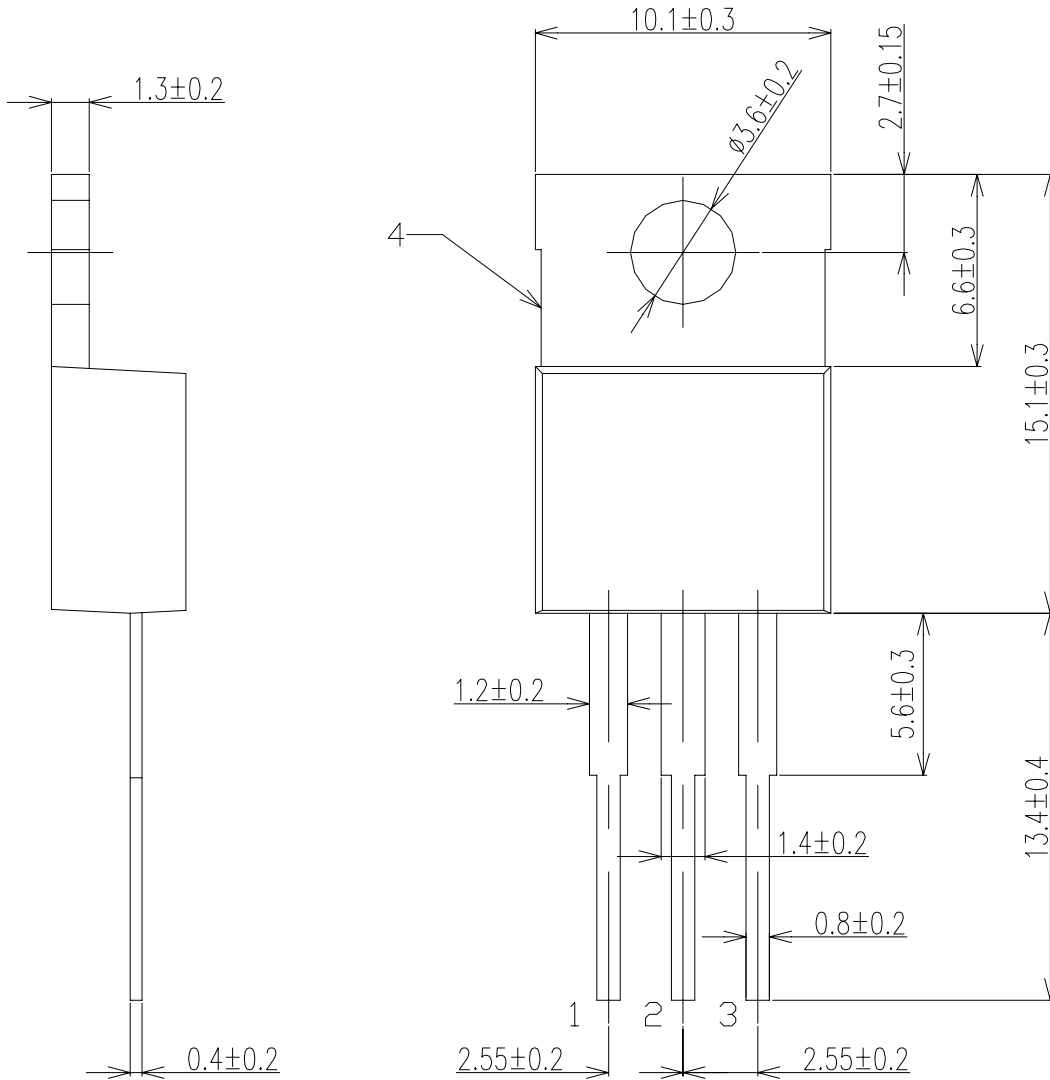
Approx Net Weight: 1.9g

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	T _c =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

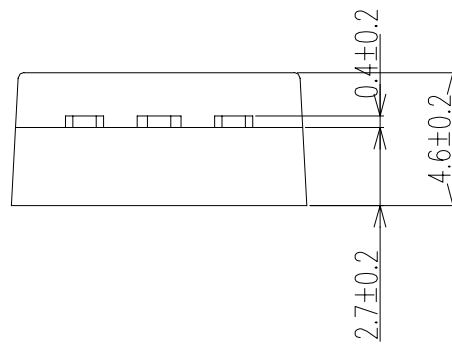
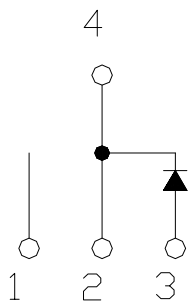
Electrical • Thermal Characteristics

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

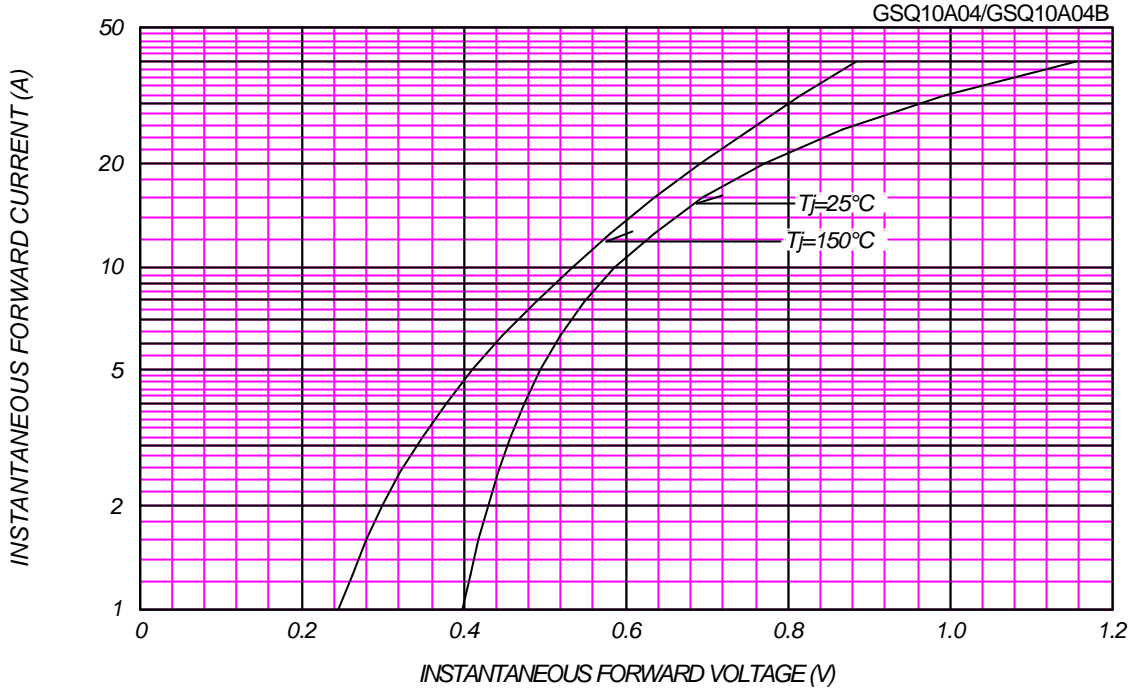
GSQ_B_ OUTLINE DRAWING (Dimensions in mm)



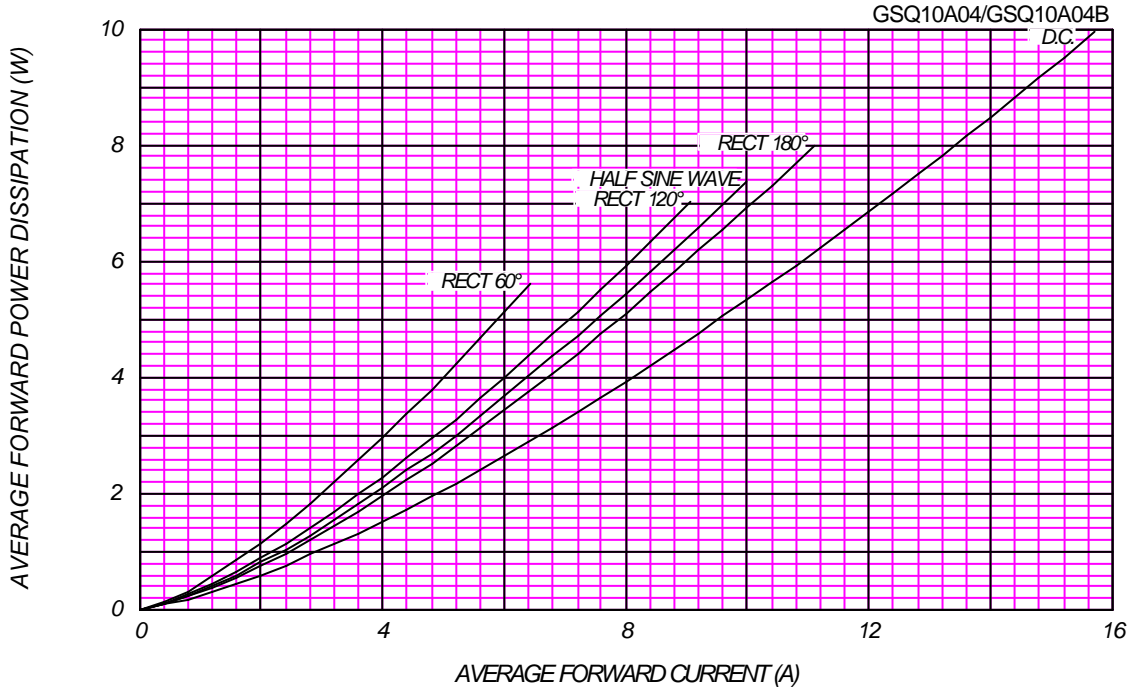
Single chip



FORWARD CURRENT VS. VOLTAGE



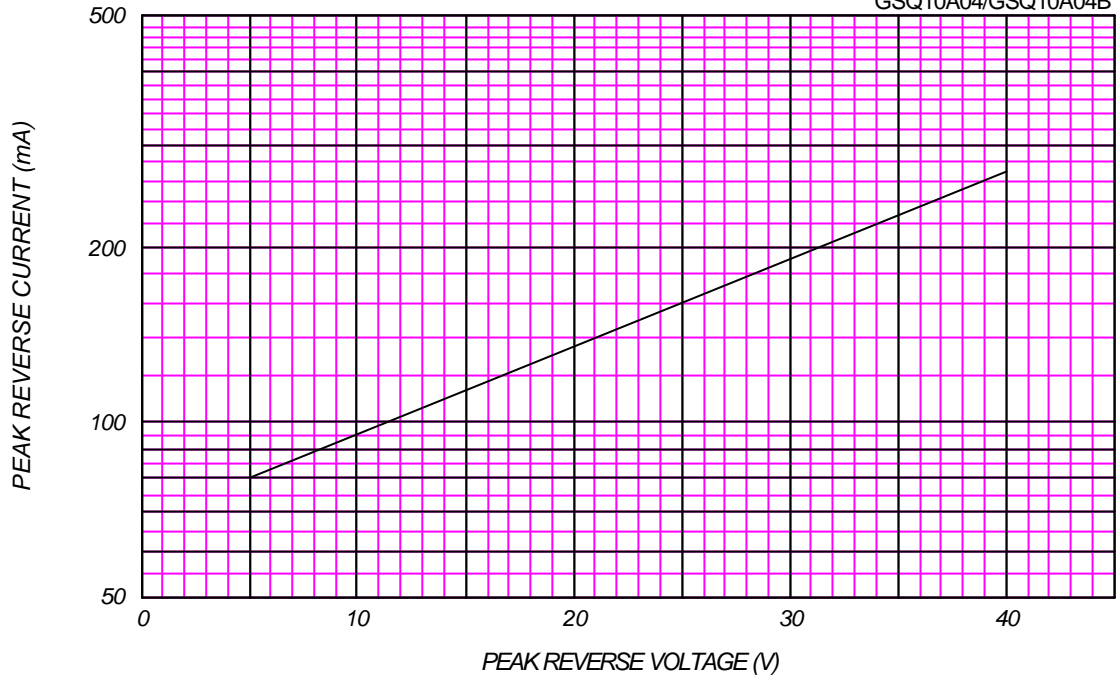
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

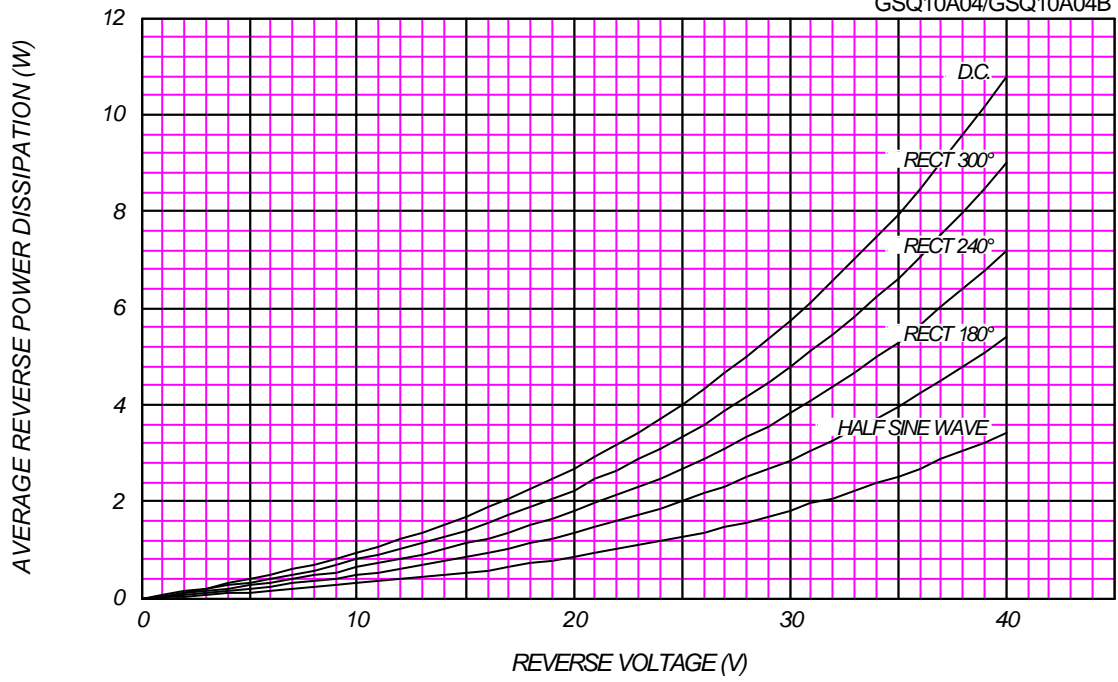
$T_j = 150\text{ }^\circ\text{C}$

GSQ10A04/GSQ10A04B



AVERAGE REVERSE POWER DISSIPATION

GSQ10A04/GSQ10A04B

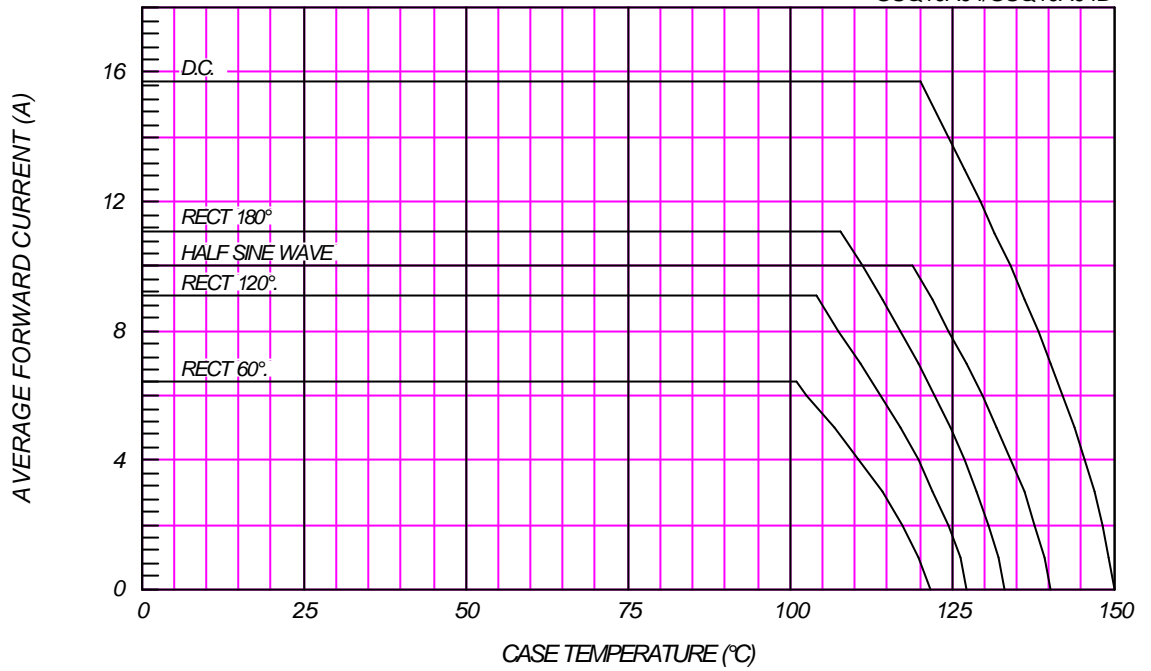




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=40V$

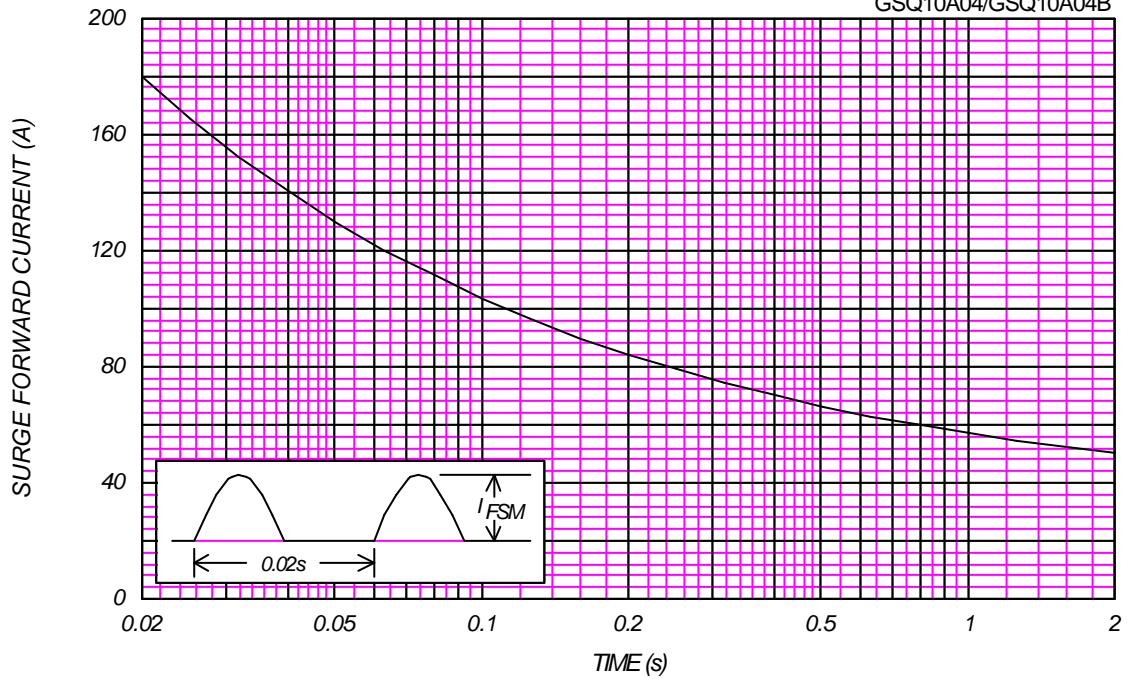
GSQ10A04/GSQ10A04B



SURGE CURRENT RATINGS

f=50Hz, 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

