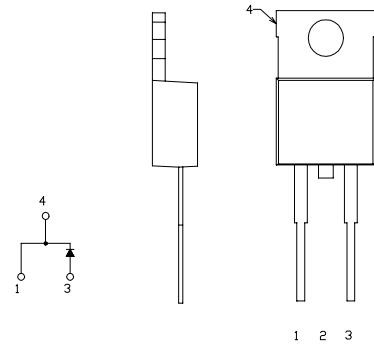


SBD Type : GSQ05A04

OULINE 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

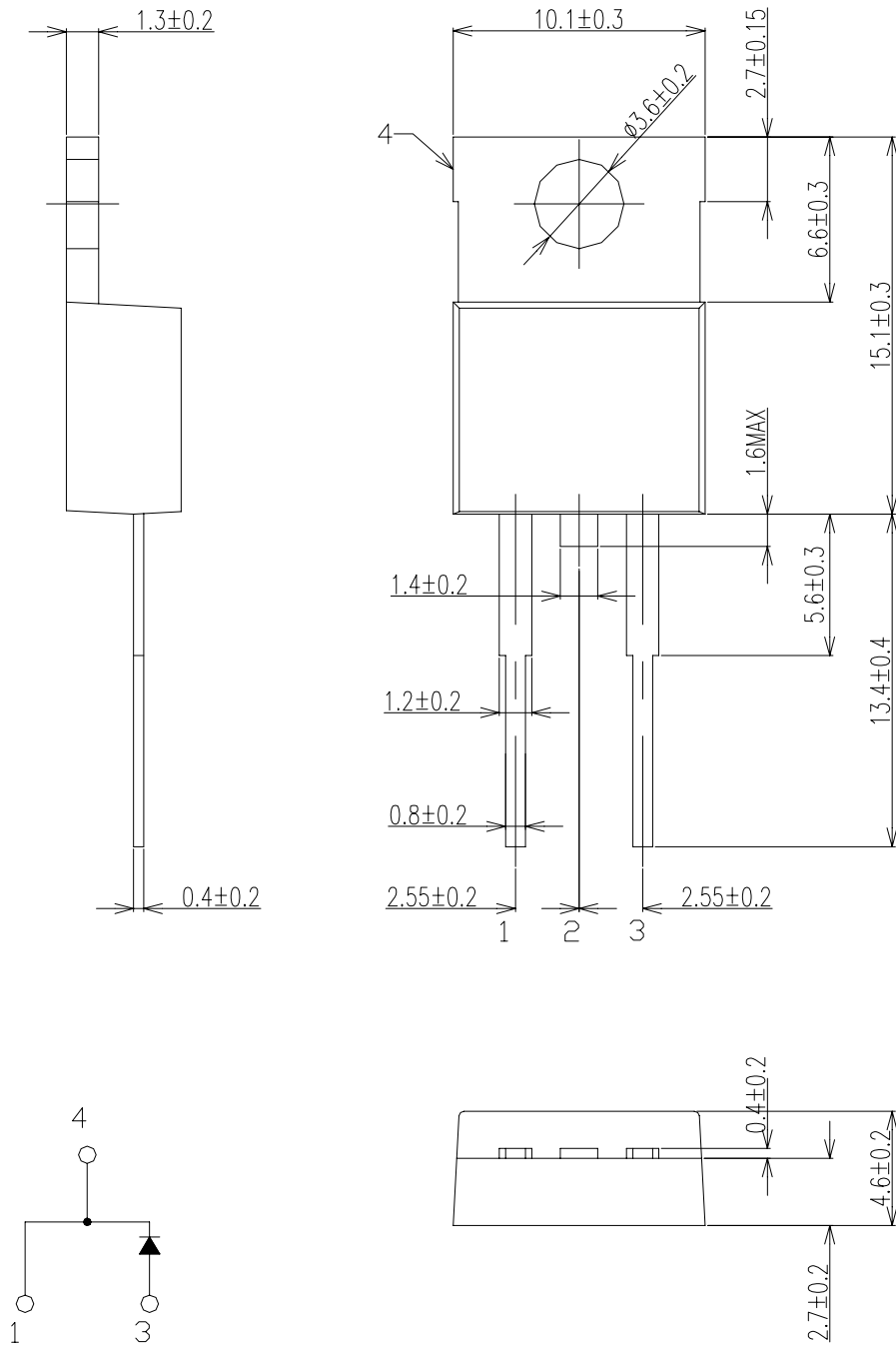
Approx Net Weight: 1.85g

Rating	Symbol	GSQ05A04		Unit
Repetitive Peak Reverse Voltage	V_{RRM}	40		V
Average Rectified Output Current	I_O	5	Tc=122°C 50 Hz half Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	7.85		A
Surge Forward Current	I_{FSM}	120	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

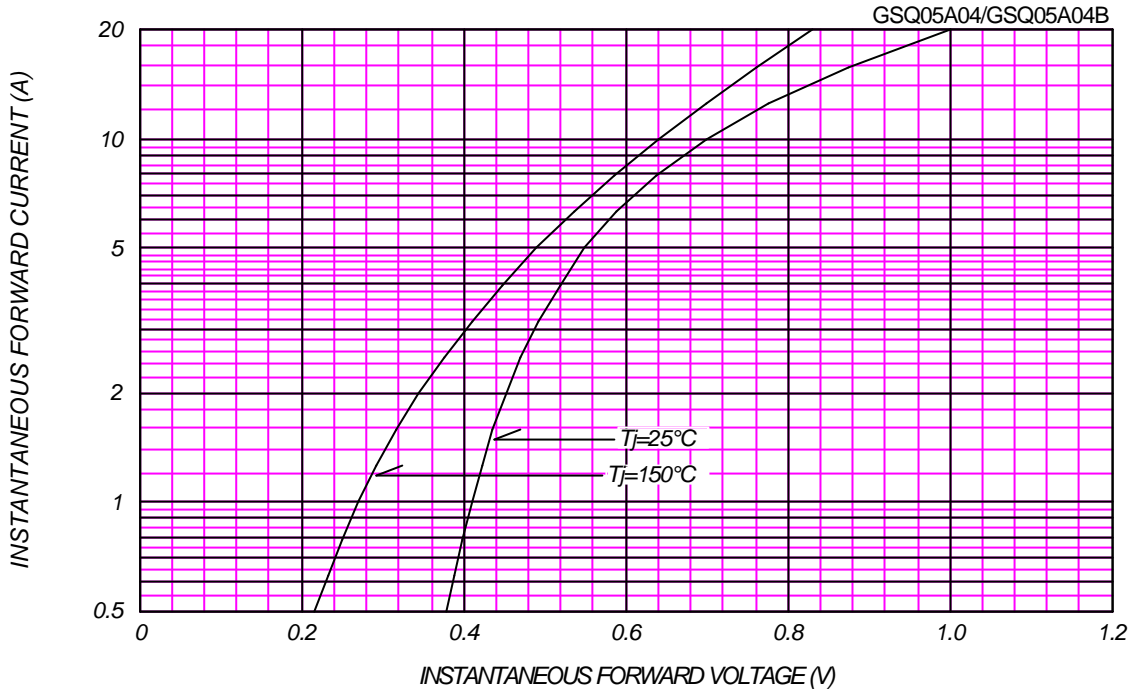
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	Tj= 25°C, $V_{RM}= V_{RRM}$	-	-	5	mA
Peak Forward Voltage	V_{FM}	Tj= 25°C, $I_{FM}= 5 A$	-	-	0.55	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	5	°C /W

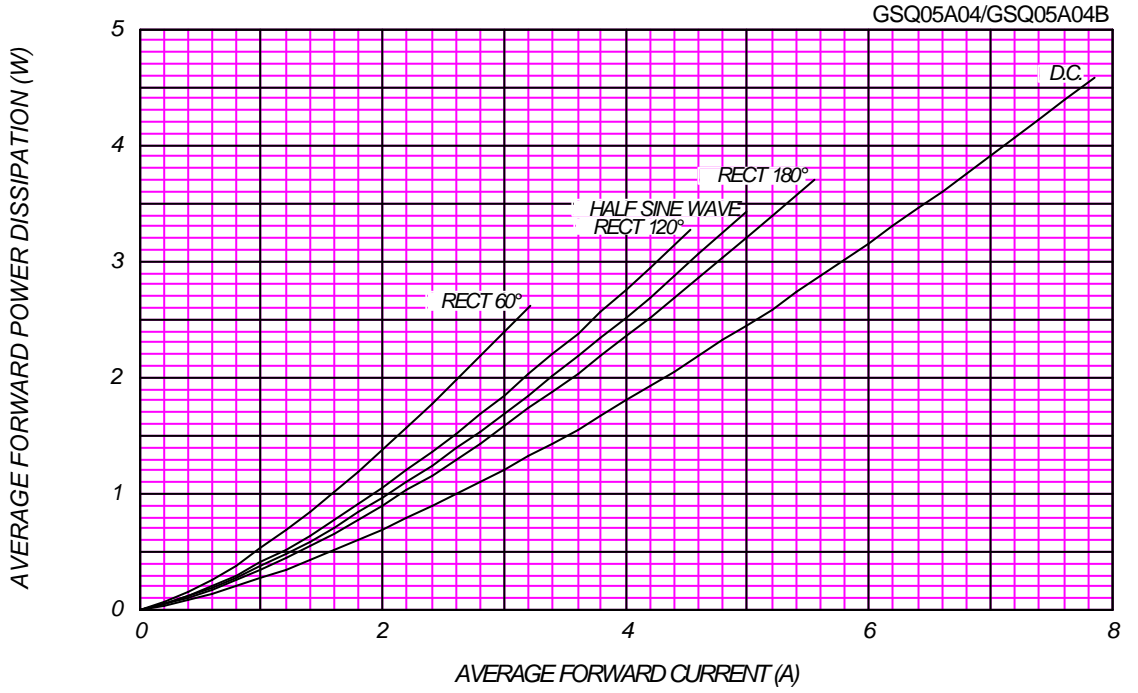
GSQ_A_OUTLINE DRAWING (Dimensions in mm)



FORWARD CURRENT VS. VOLTAGE



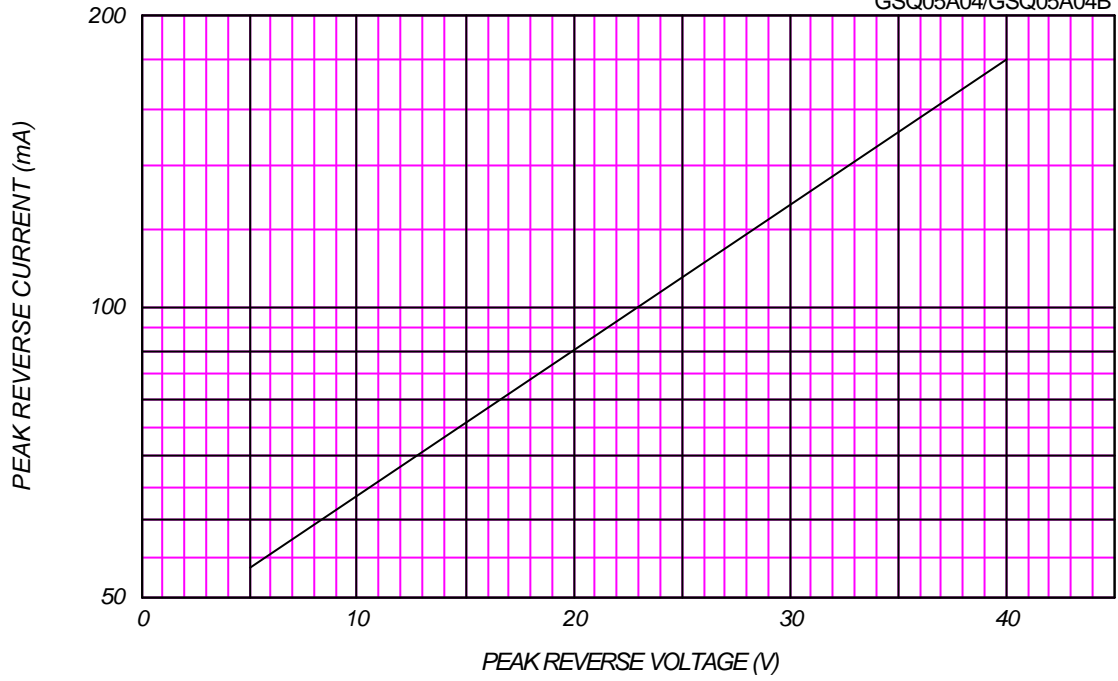
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

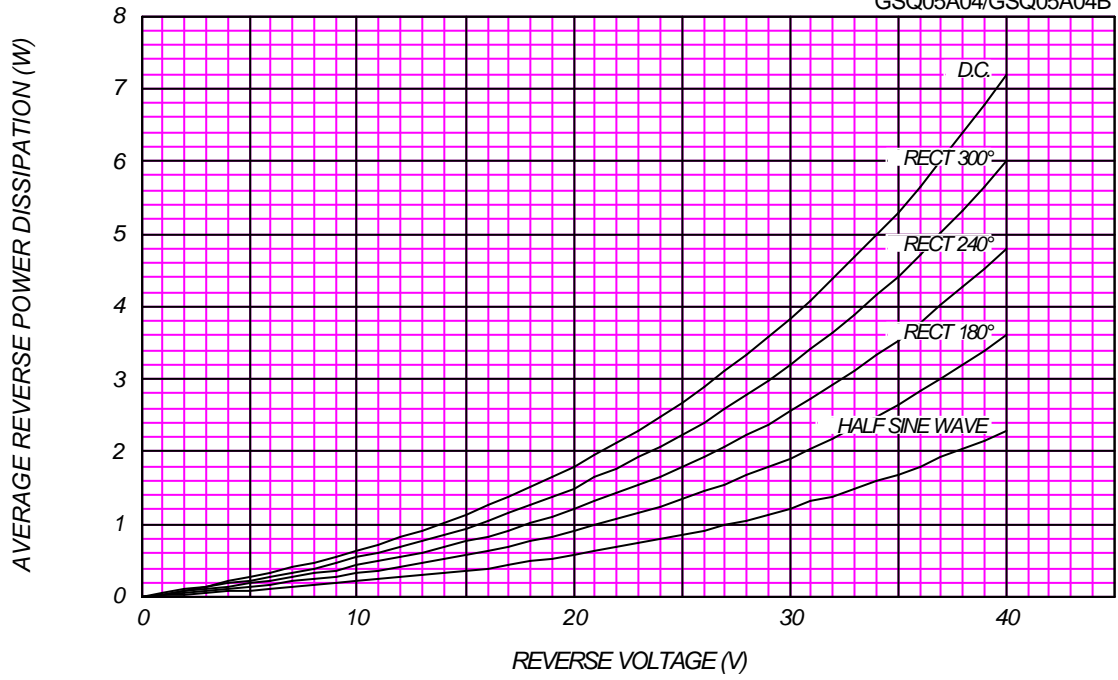
$T_j = 150\text{ }^\circ\text{C}$

GSQ05A04/GSQ05A04B



AVERAGE REVERSE POWER DISSIPATION

GSQ05A04/GSQ05A04B

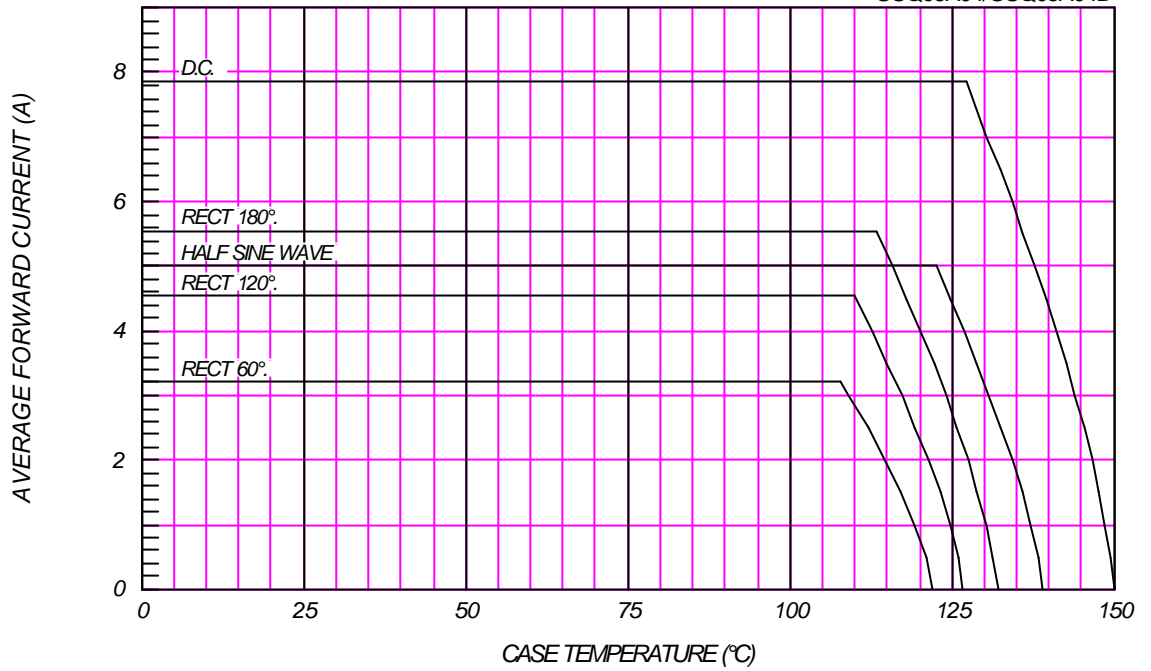




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=40V$

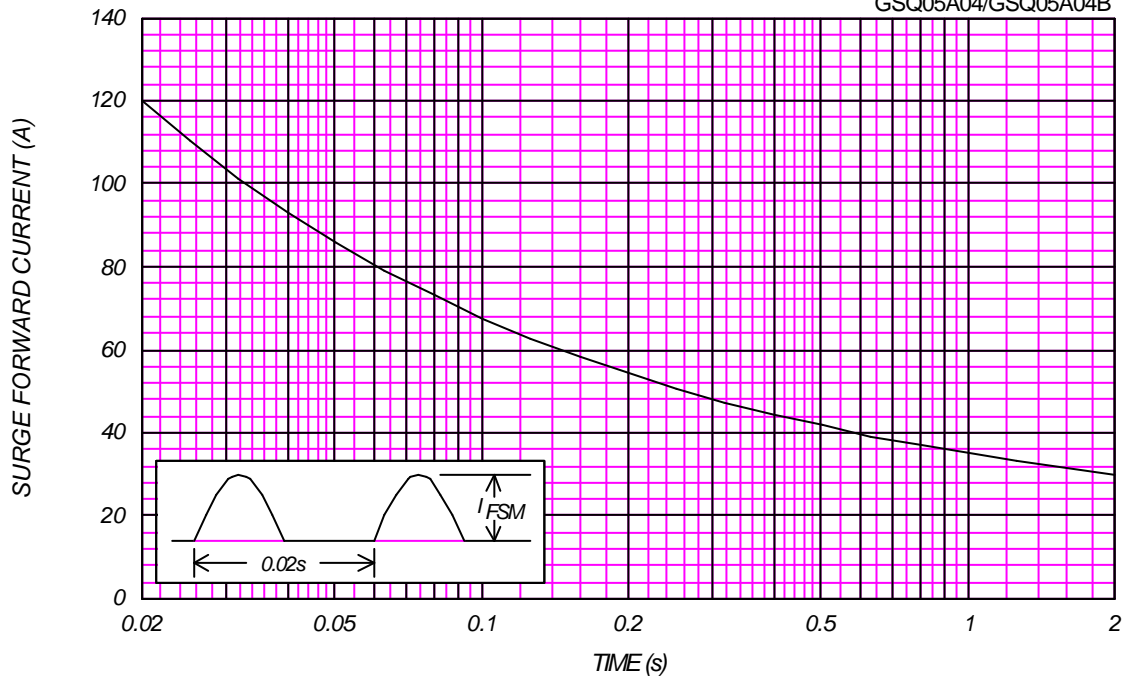
GSQ05A04/GSQ05A04B



SURGE CURRENT RATINGS

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

GSQ05A04/GSQ05A04B



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

GSQ05A04/GSQ05A04B

