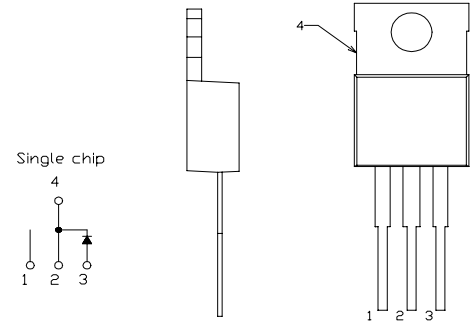


FRD Type : GSF05A40B

OUTLINE DRAWING

FEATURES

- * Similar to TO-220AB Case
- * Ultra – Fast Recovery
- * Low Forward Voltage Drop
- * Low Power Loss, High Efficiency
- * High Surge Capability
- * 200 Volts thru 600 Volts Types Available



Maximum Ratings

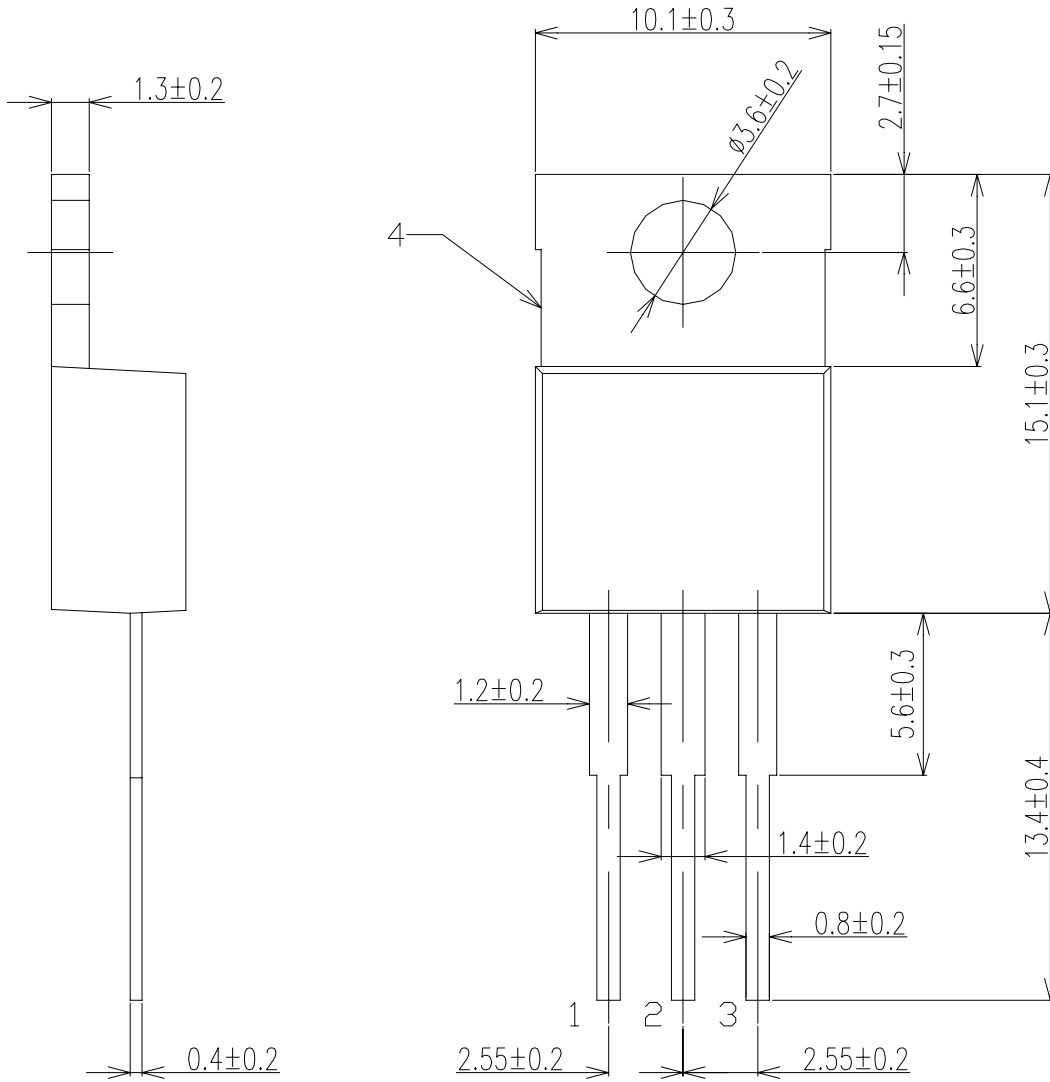
Approx Net Weight:1.9g

Rating	Symbol	GSF05A40B		Unit
Repetitive Peak Reverse Voltage	V_{RRM}	400		V
Non-repetitive Peak Reverse Voltage	V_{RSM}	440		
Average Rectified Output Current	I_O	5	$T_c=118^\circ\text{C}$ 50 Hz Half Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	7.85		A
Surge Forward Current	I_{FSM}	80	50 Hz Half Sine Wave, 1cycle Non-repetitive	A
Operating Junction Temperature Range	T_{jw}	- 40 to + 150		$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 40 to + 150		$^\circ\text{C}$
Mounting torque		0.5	Recommended value	N.m

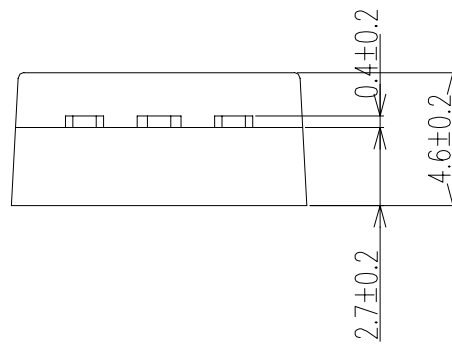
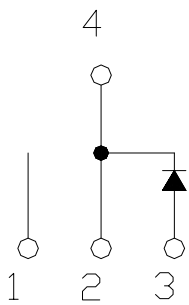
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j= 25^\circ\text{C}, V_{RM}= V_{RRM}$	-	-	30	μA
Peak Forward Voltage	V_{FM}	$T_j= 25^\circ\text{C}, I_{FM}= 5\text{A}$	-	-	1.25	V
Reverse Recovery Time	t_{rr}	$I_{FM}= 5\text{A},$ $-di/dt= 50 \text{ A}/\mu\text{s}, T_a= 25^\circ\text{C}$	-	-	45	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	5	$^\circ\text{C}/\text{W}$

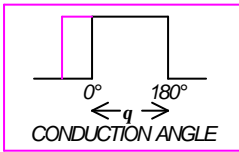
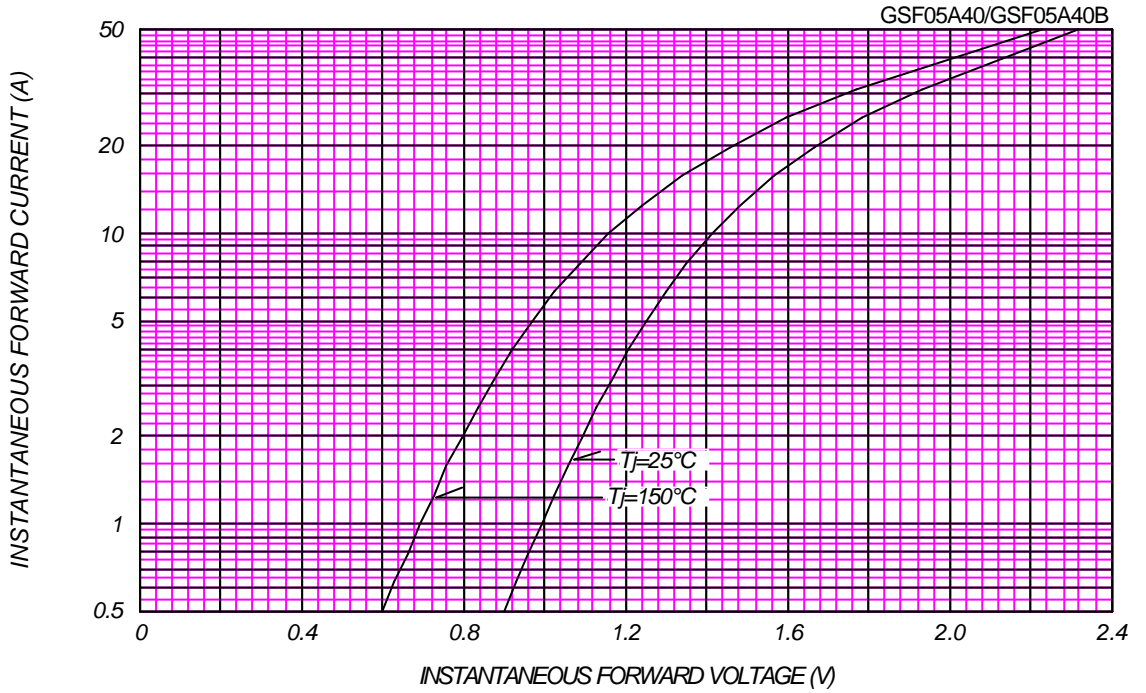
GSF_B_ OUTLINE DRAWING (Dimensions in mm)



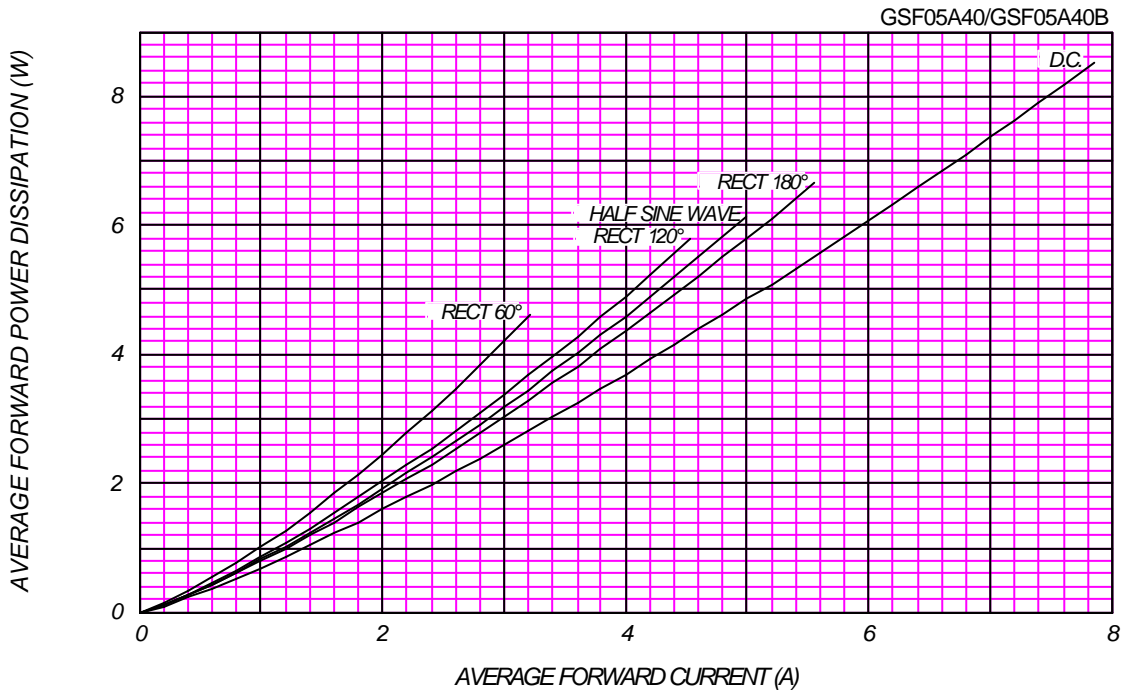
Single chip

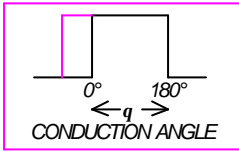


FORWARD CURRENT VS. VOLTAGE

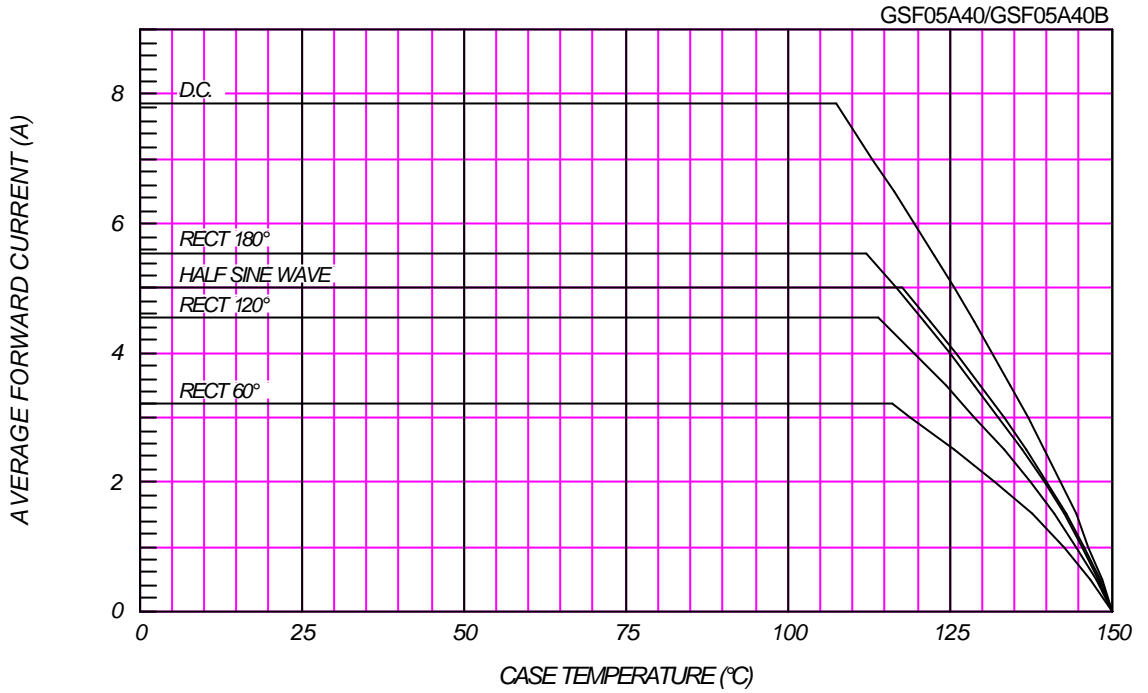


AVERAGE FORWARD POWER DISSIPATION





AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



SURGE CURRENT RATINGS

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

