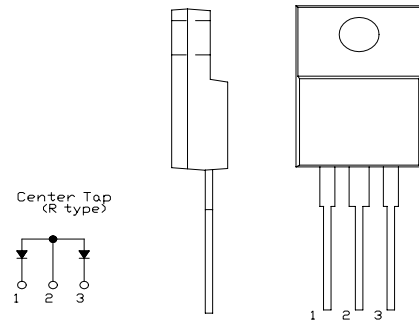


# FRD Type : FRF10A40

## OUTLINE DRAWING

### FEATURES

- \* Fully Molded Isolation
- \* Dual Diodes – Anode Common
- \* Ultra – Fast Recovery
- \* Low Forward Voltage Drop
- \* High Surge Capability
- \* 200 Volts thru 600 Volts Types Available



### Maximum Ratings

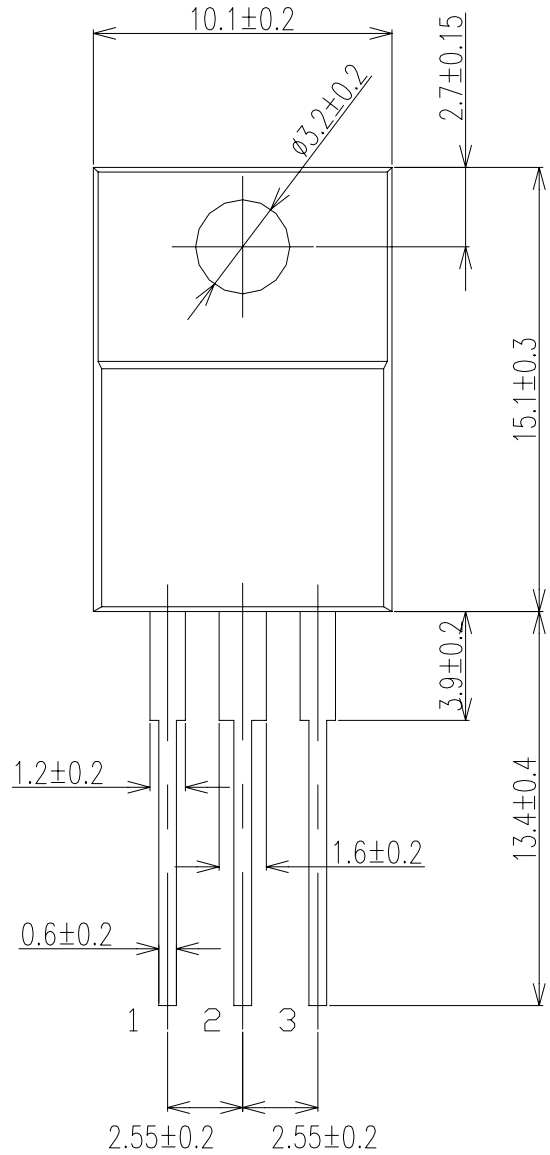
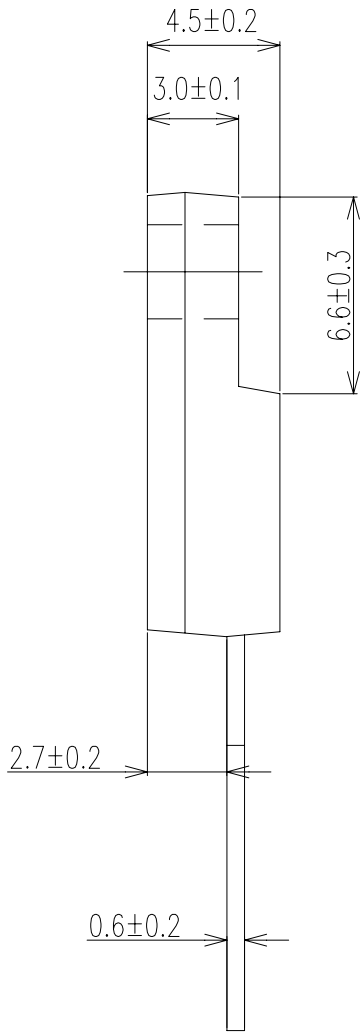
Approx Net Weight:1.75g

Rating	Symbol	FRF10A40		Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	400		V
Non-repetitive Peak Reverse Voltage	$V_{RSM}$	440		V
Average Rectified Output Current	$I_o$	10	$T_c=112^\circ\text{C}$ 50 Hz, Full Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	11.1		A
Surge Forward Current	$I_{FSM}$	80	50 Hz Full Sine Wave, 1 cycle 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

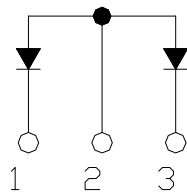
### Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	$I_{RM}$	$T_j=25^\circ\text{C}, V_{RM}=V_{RRM}$ per Arm	-	-	30	$\mu\text{A}$
Peak Forward Voltage	$V_{FM}$	$T_j=25^\circ\text{C}, I_{FM}=5\text{A}$ per Arm	-	-	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	-	-	3	$^\circ\text{C}/\text{W}$
	$R_{th(c-f)}$	Case to Fin			1.5	

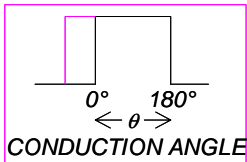
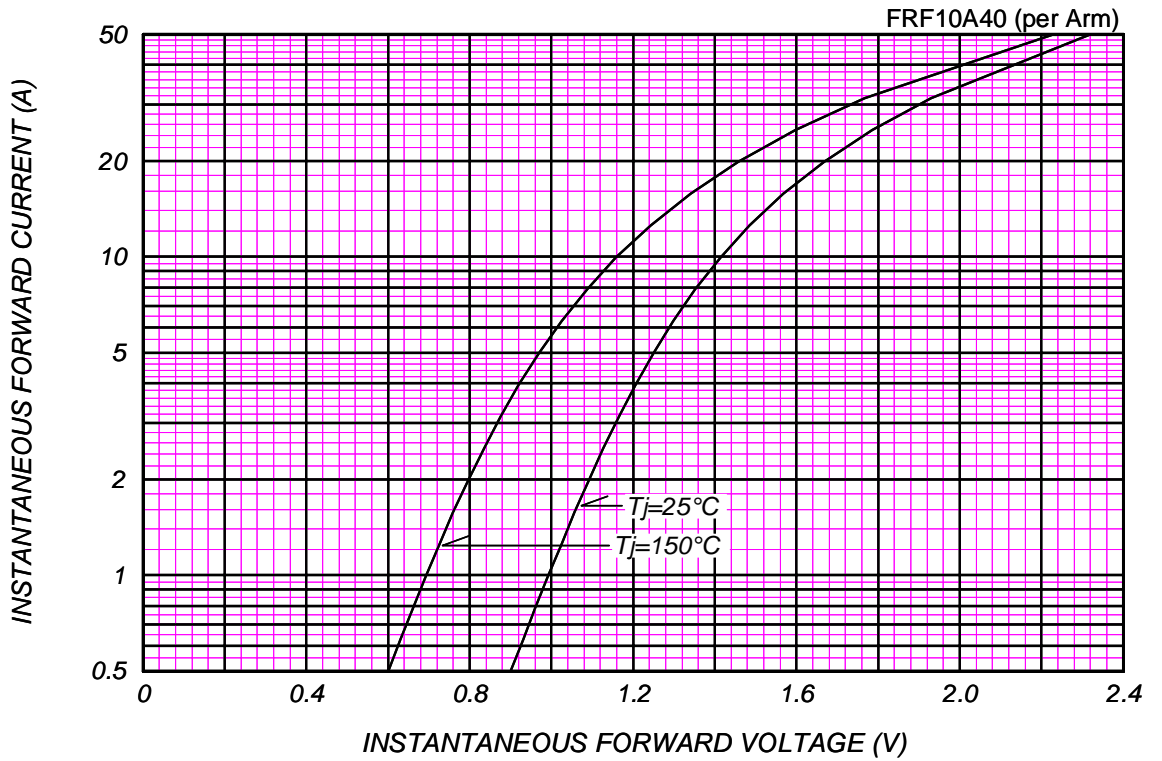
FRF\_A\_ OUTLINE DRAWING (Dimensions in mm)



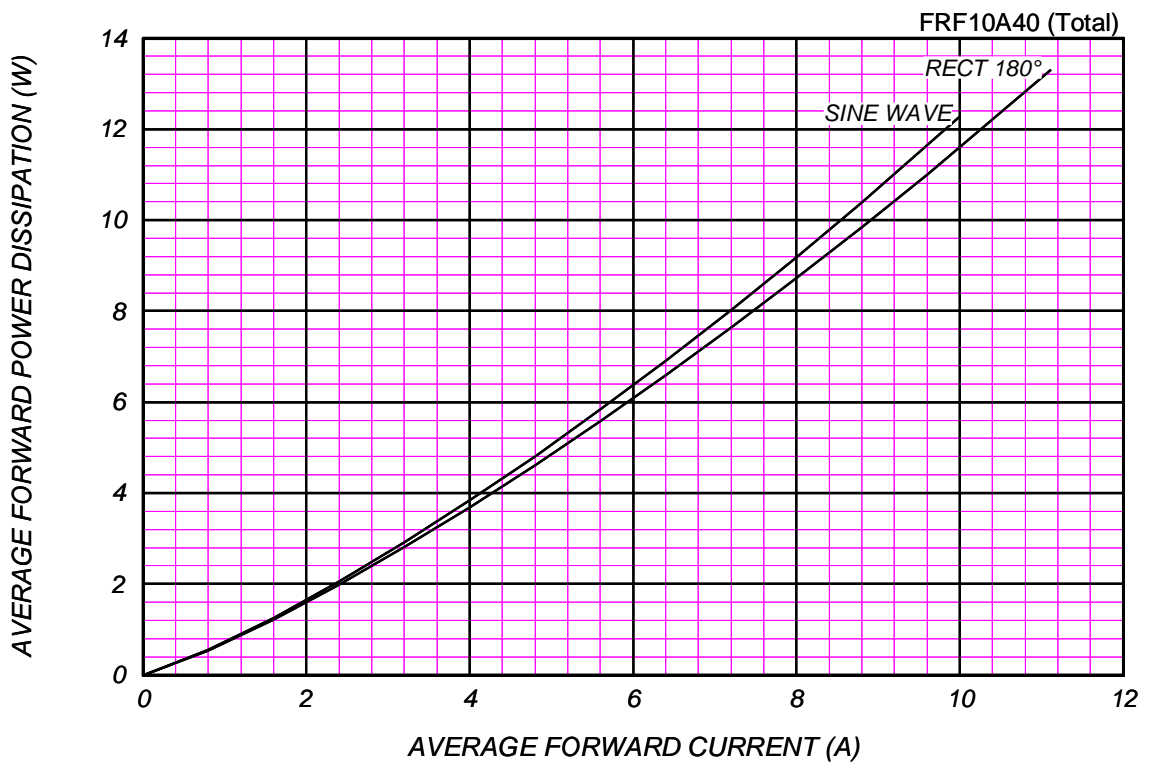
Center Tap  
(R type)

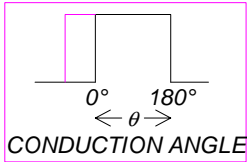


### FORWARD CURRENT VS. VOLTAGE

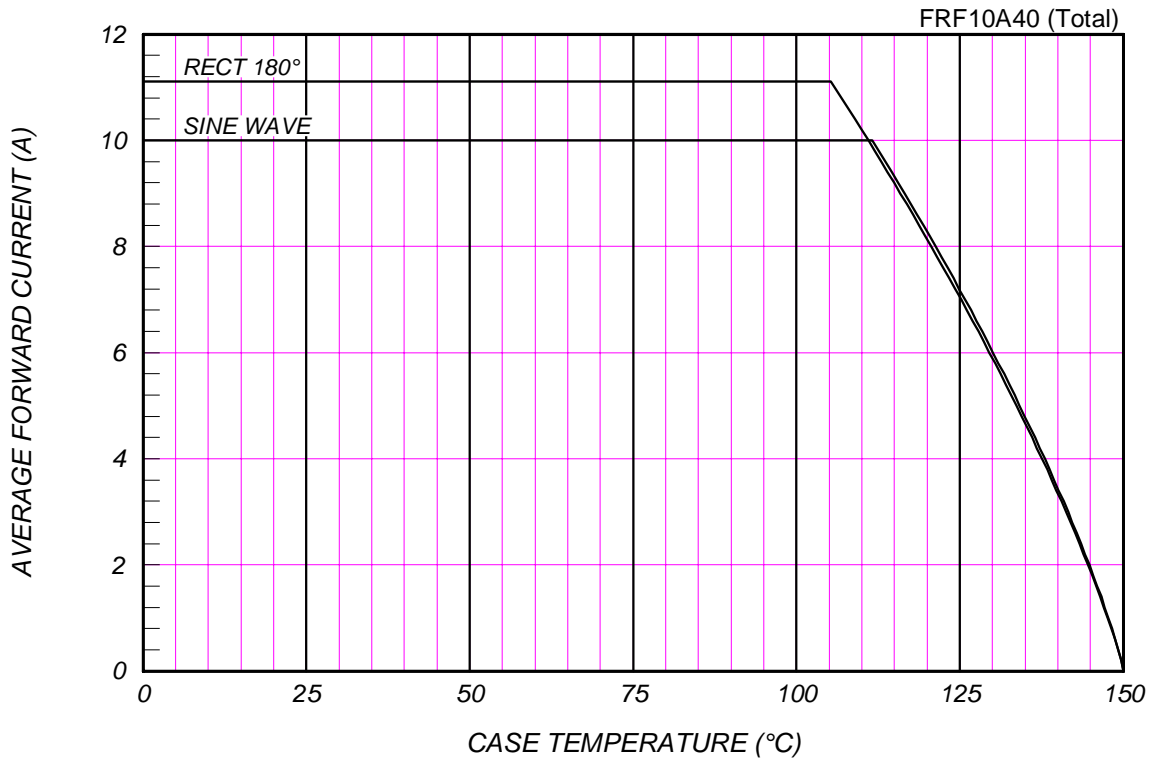


### AVERAGE FORWARD POWER DISSIPATION





### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



### SURGE CURRENT RATINGS

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

