

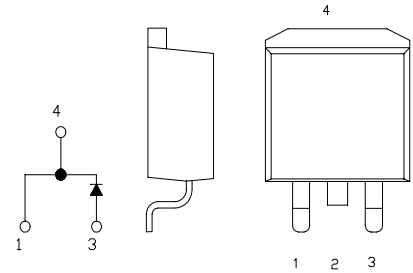
# FRD Type : TSF05A40

## OUTLINE DRAWING

For Power Factor Improvement High Frequency Rectification

### FEATURES

- \* Fast Recovery
- \* Low Forward Voltage Drop
- \* Low Power Loss, High Efficiency
- \* High Surge Capability



### Maximum Ratings

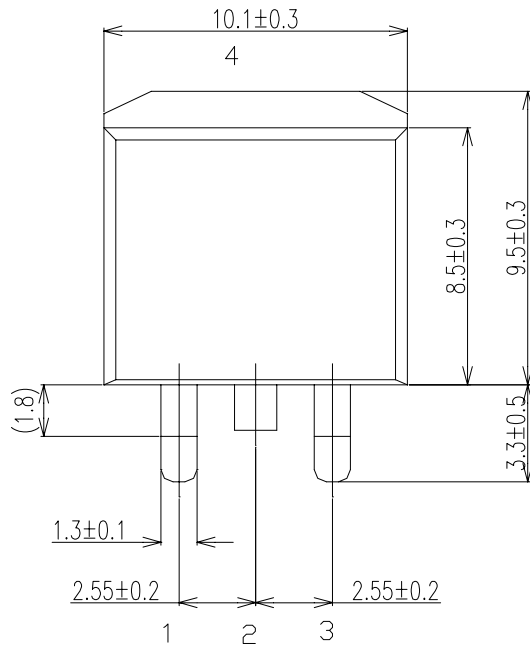
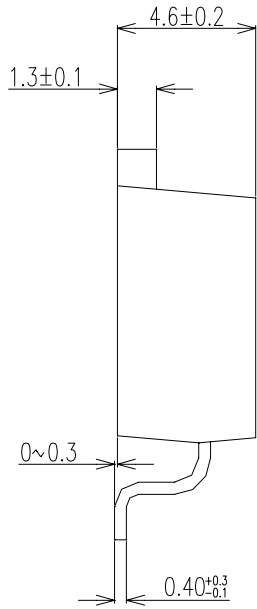
Approx Net Weight:1.45g

Rating	Symbol	TSF05A40		Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	400		V
Average Rectified Output Current	$I_O$	5	$T_c=118^{\circ}C$ 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		$^{\circ}C$
Storage Temperature Range	$T_{stg}$	- 40 to + 150		$^{\circ}C$

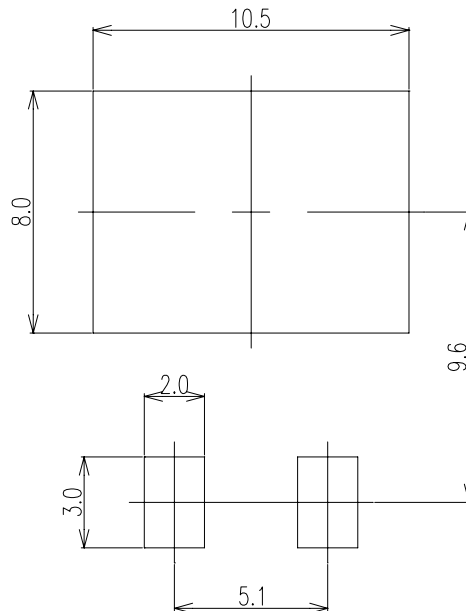
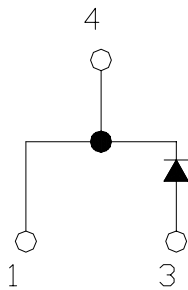
### Electrical • Thermal Characteristics

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

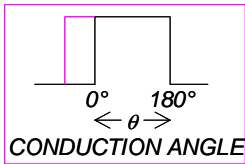
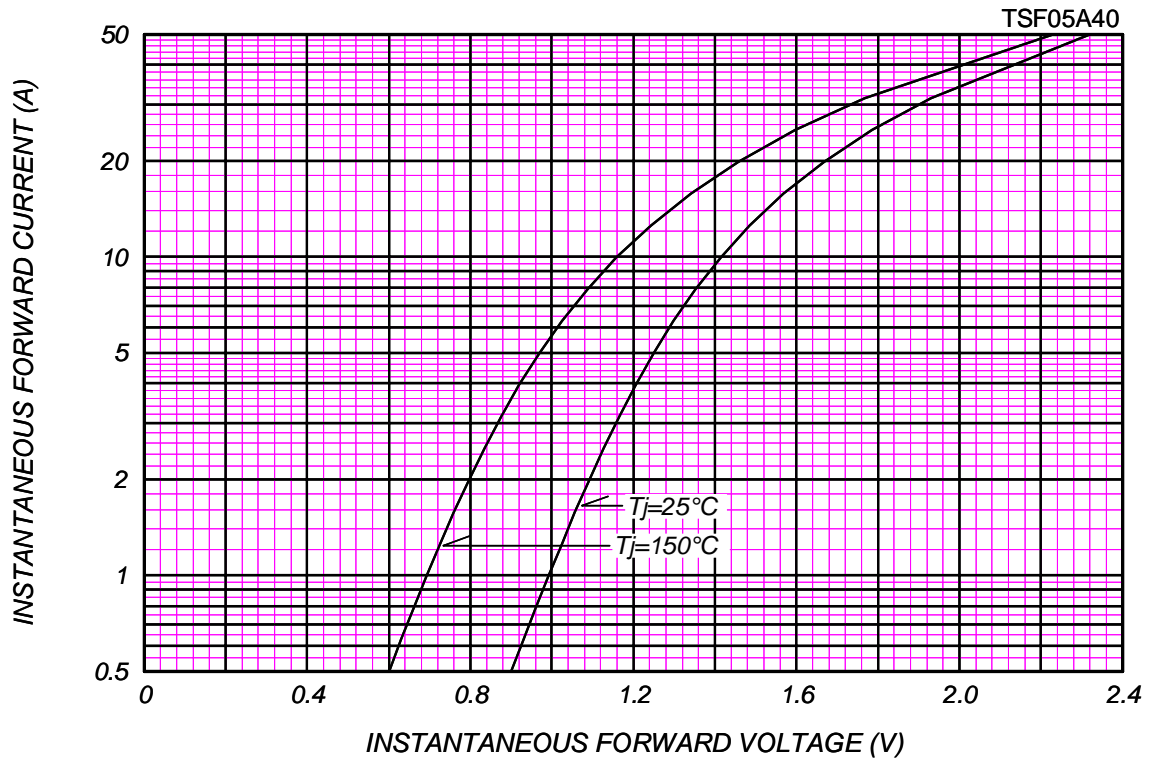
TSF\_ OUTLINE DRAWING (Dimensions in mm)



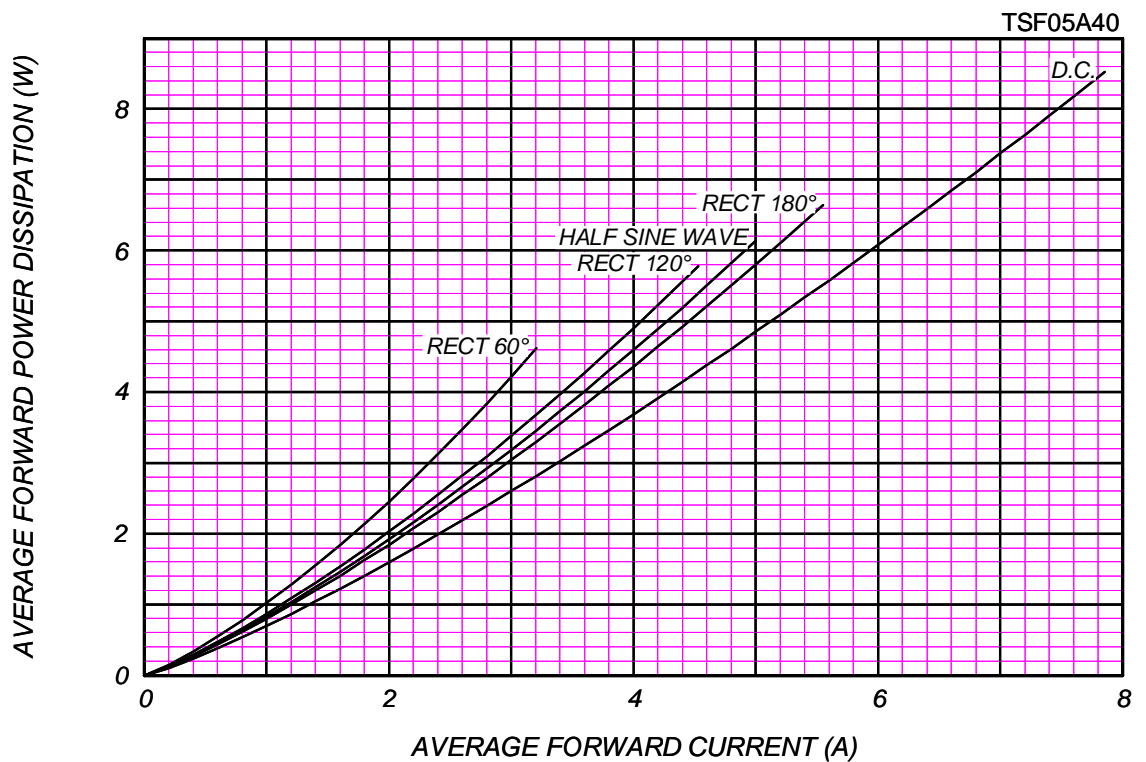
SOLDERING PAD

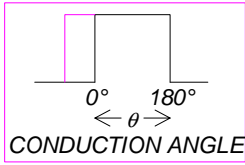


### FORWARD CURRENT VS. VOLTAGE

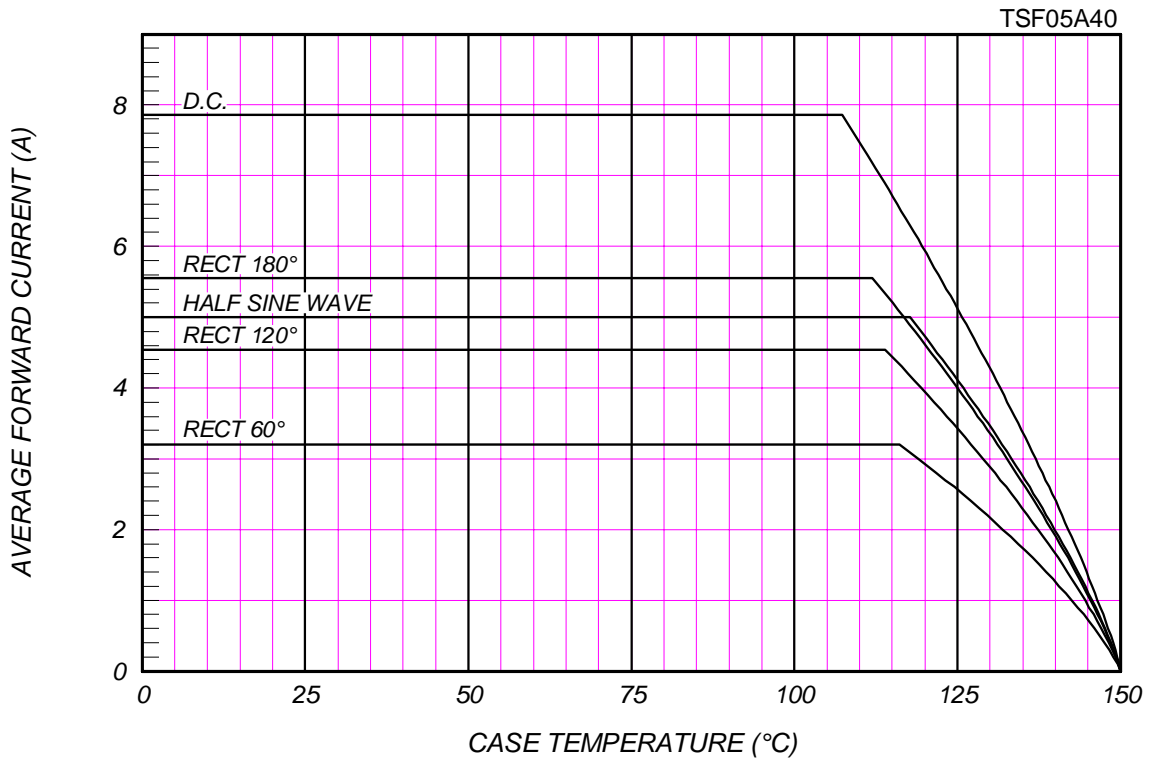


### AVERAGE FORWARD POWER DISSIPATION





### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



### SURGE CURRENT RATINGS

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

