



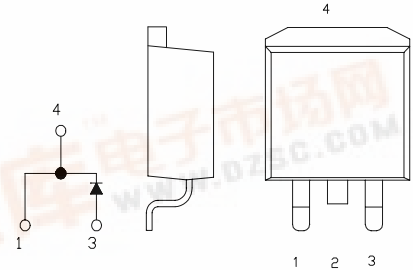
FRD Type : TSU05B60

OUTLINE DRAWING

For Power Factor Improvement High Frequency Rectification

FEATURES

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



Maximum Ratings

Approx Net Weight:1.45g

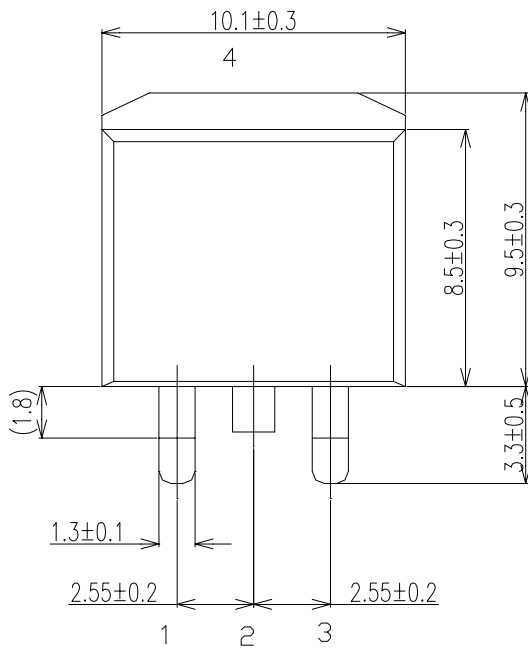
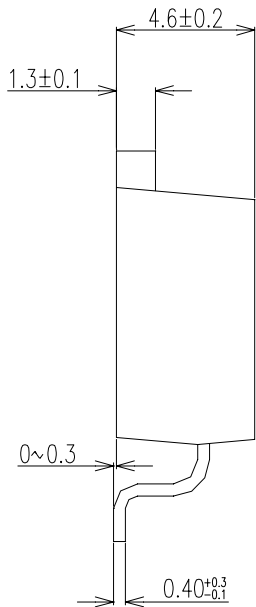
Rating	Symbol	TSU05B60		Unit
Repetitive Peak Reverse Voltage	V_{RRM}	600		V
Average Rectified Output Current	I_O	5	$T_c=89^\circ C$ 50 Hz Half Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	15.7		A
Surge Forward Current	I_{FSM}	60	50 Hz Half Sine Wave, 1 cycle Non-repetitive	A
Operating Junction Temperature Range	T_{jw}	- 40 to + 150		$^\circ C$
Storage Temperature Range	T_{stg}	- 40 to + 150		$^\circ C$
Mounting torque		0.5	Recommended value	N.m

Electrical • Thermal Characteristics

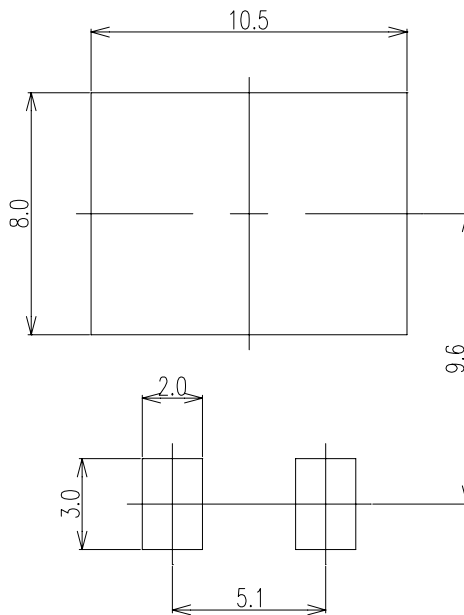
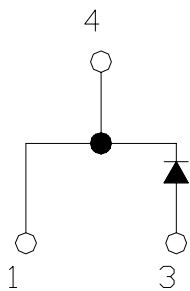
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j= 25^\circ C, V_{RM}= V_{RRM}$	-	-	30	μA
Peak Forward Voltage	V_{FM}	$T_j= 25^\circ C, I_{FM}= 5A$	-	2.3	2.7	V
Reverse Recovery Time	trr	$I_{FM}= 5A, -di/dt= 50 A/\mu s, T_a= 25^\circ C$	-	19	30	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	5	$^\circ C/W$



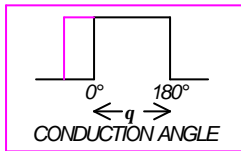
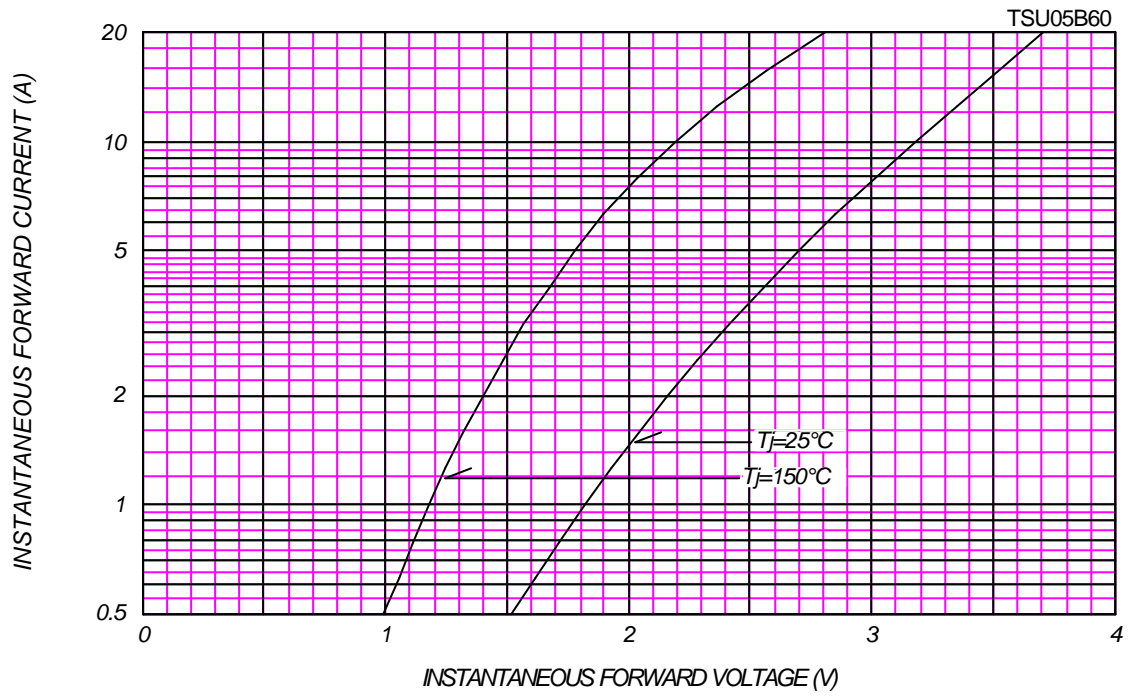
TSU_OUTLINE DRAWING (Dimensions in mm)



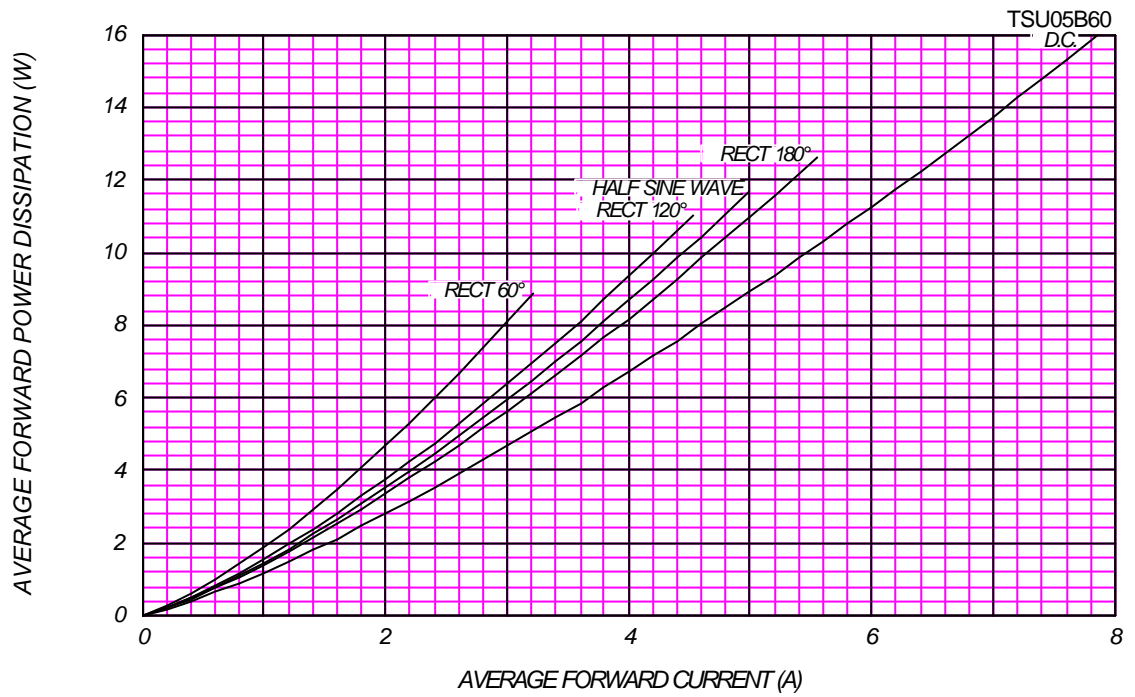
SOLDERING PAD

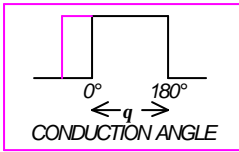


FORWARD CURRENT VS. VOLTAGE

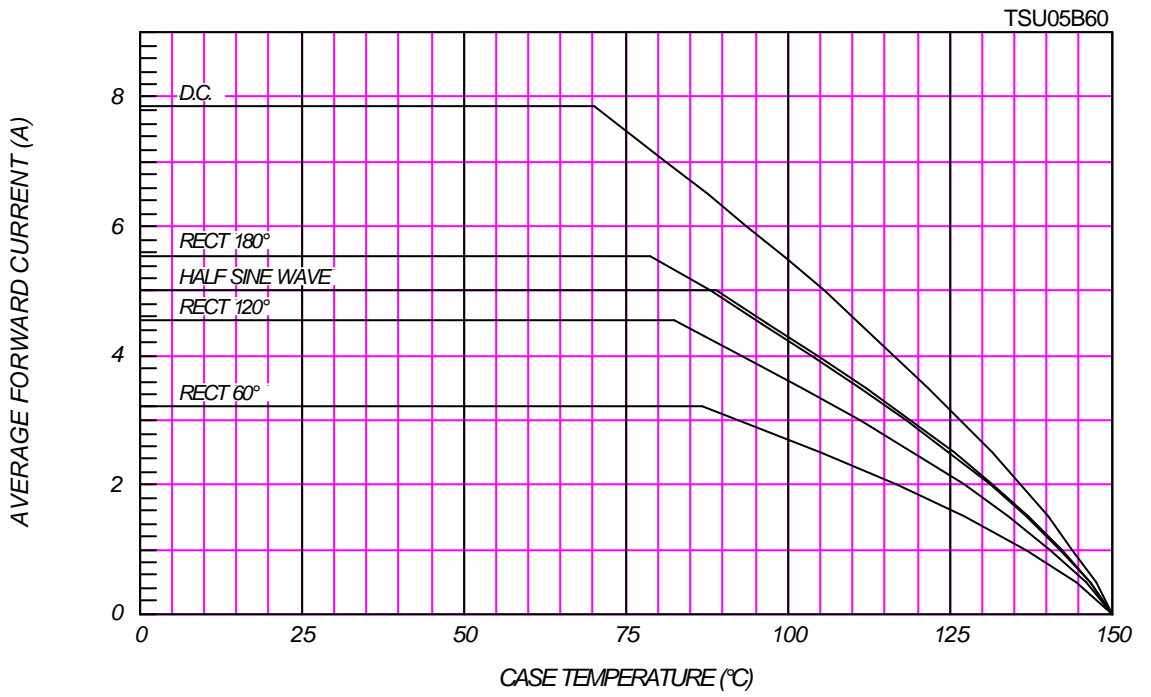


AVERAGE FORWARD POWER DISSIPATION



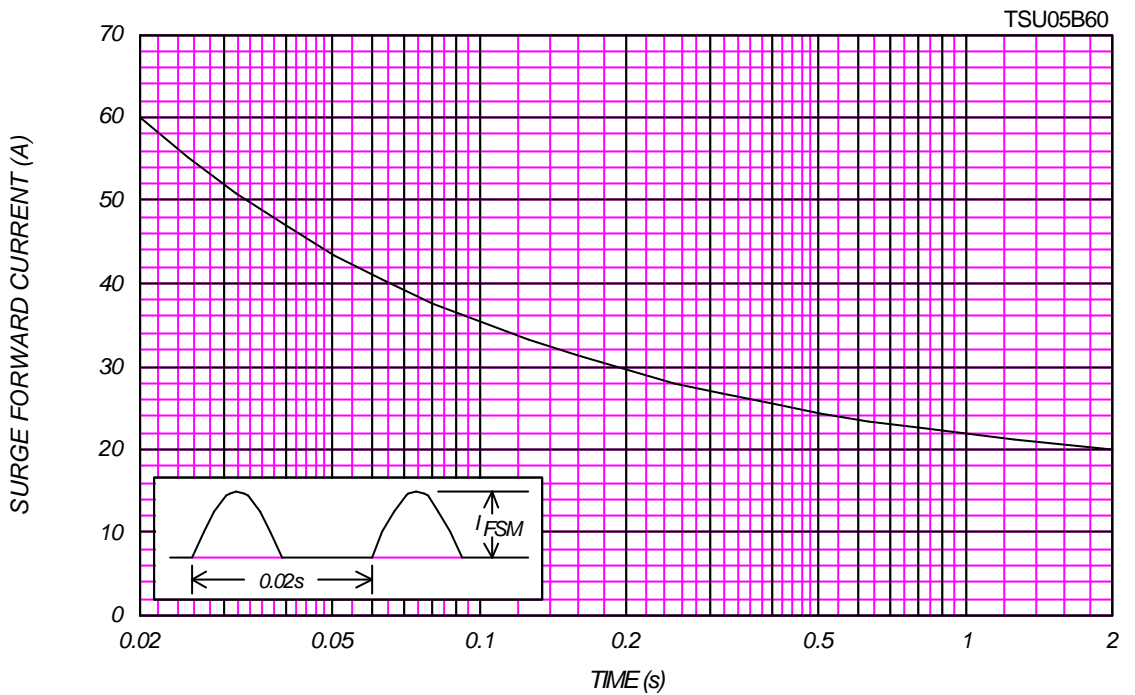


AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



SURGE CURRENT RATINGS

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



RMS SURGE CURRENT RATINGS

Ta=40°C, Non-Repetitive, No Load

TSU05B60

