

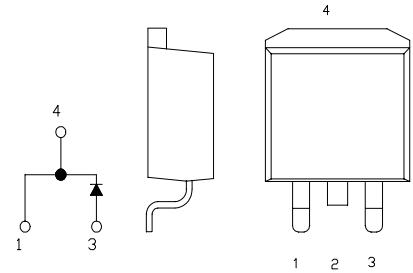
FRD Type : TSF05A20

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

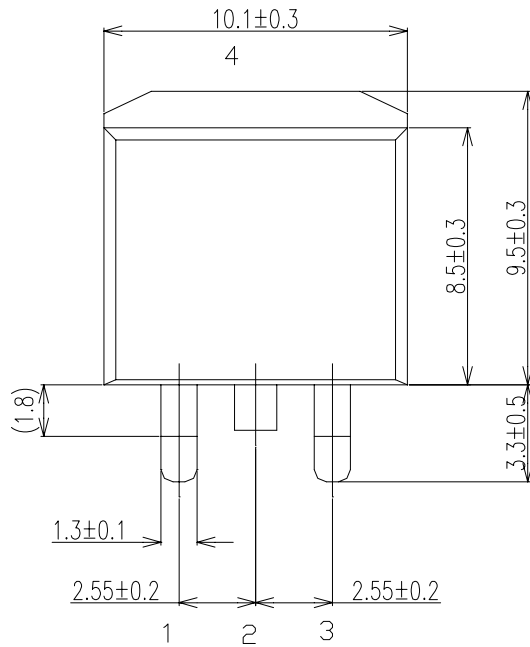
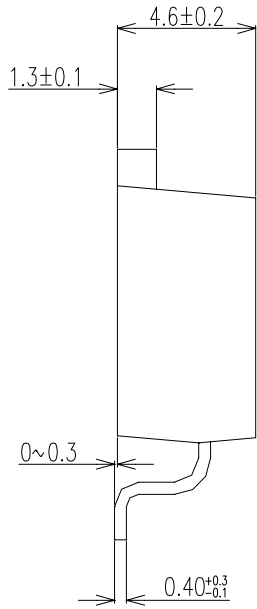
Approx Net Weight:1.45g

Rating	Symbol	TSF05A20		Unit
Repetitive Peak Reverse Voltage	V_{RRM}	200		V
Average Rectified Output Current	I_O	5	$T_c=122^\circ\text{C}$ 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		$^\circ\text{C}$

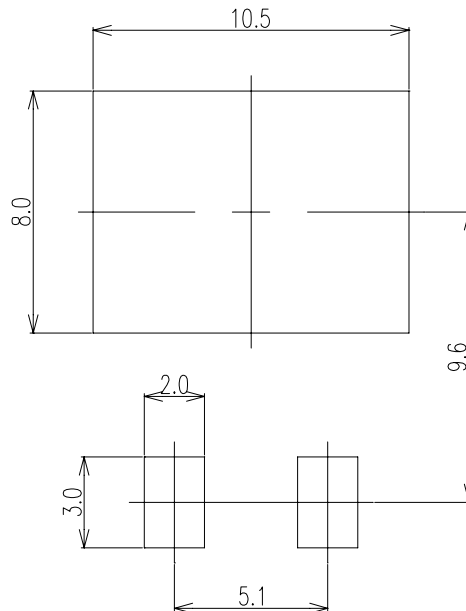
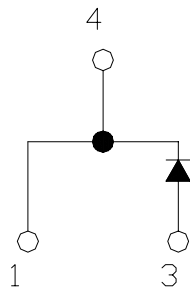
Electrical • Thermal Characteristics

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}	$T_j= 25^\circ\text{C}$, $I_{FM}= 5\text{A}$	-	-	0.98	V
Reverse Recovery Time	t_{rr}	$I_{FM}= 5\text{A}$, $-di/dt= 50 \text{ A}/\mu\text{s}$, $T_a= 25^\circ\text{C}$	-	-	35	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	5	$^\circ\text{C}/\text{W}$

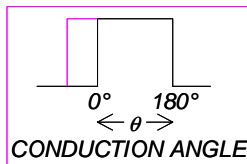
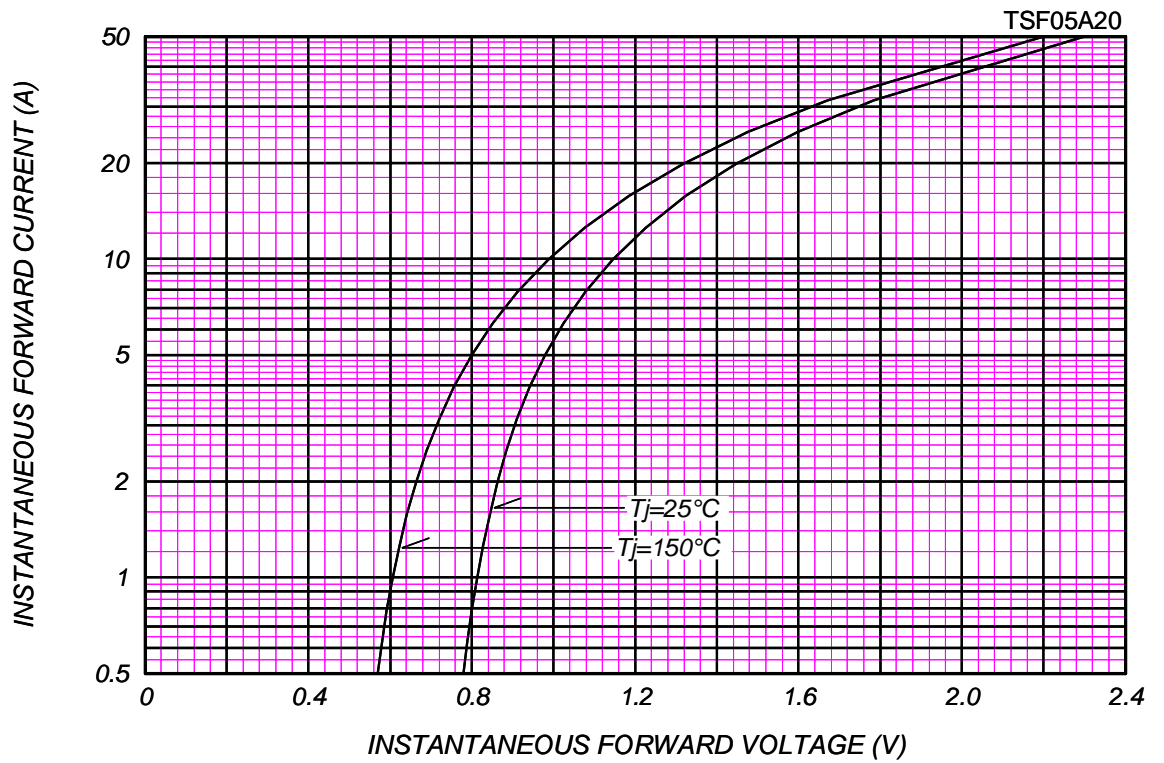
TSF_ OUTLINE DRAWING (Dimensions in mm)



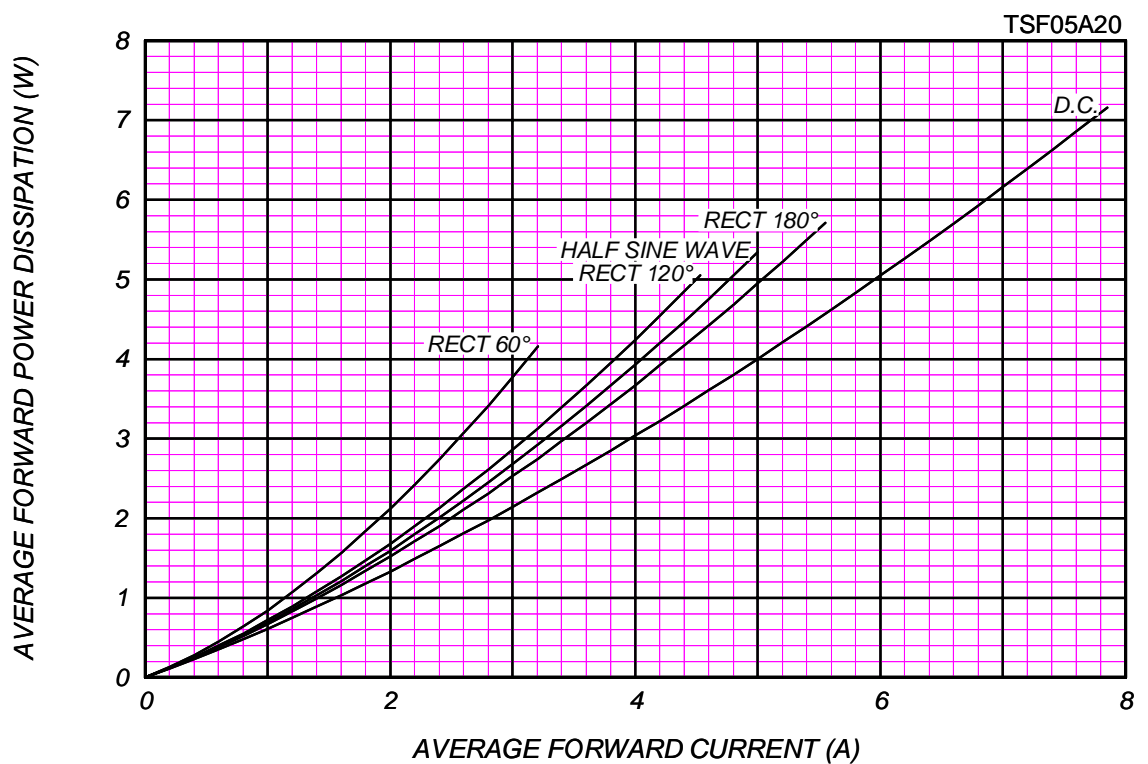
SOLDERING PAD

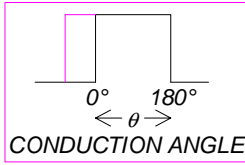


FORWARD CURRENT VS. VOLTAGE

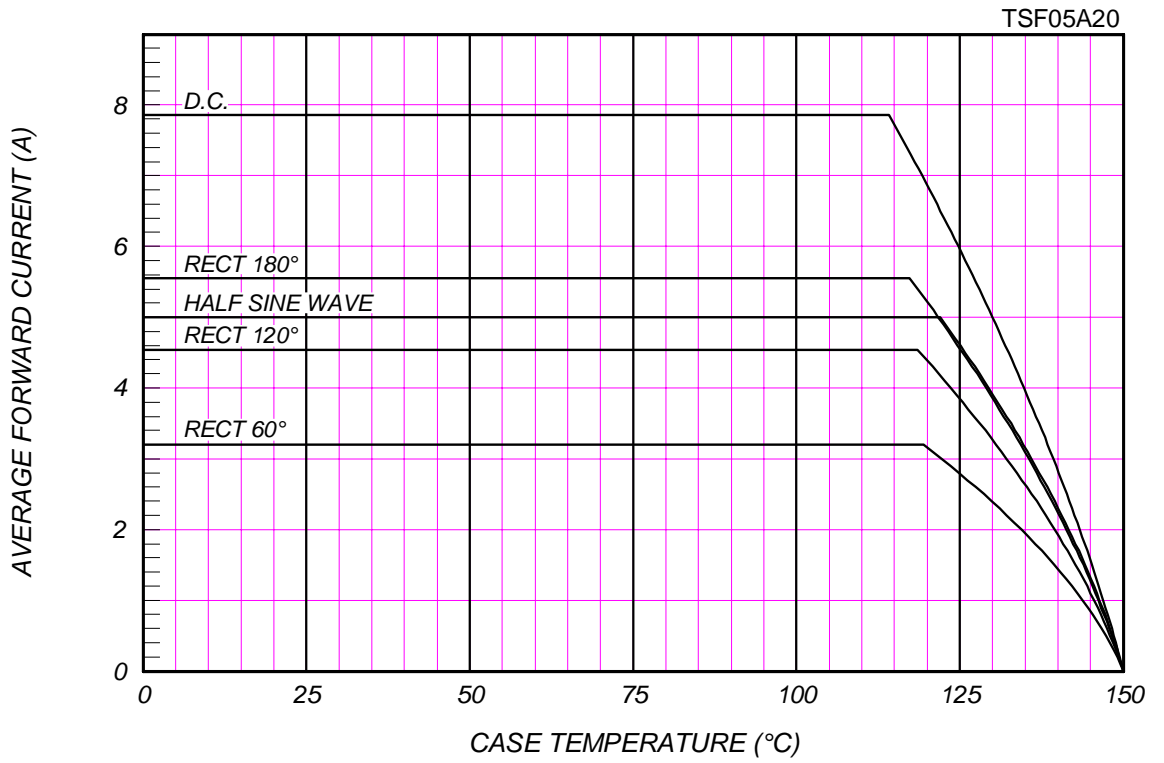


AVERAGE FORWARD POWER DISSIPATION





AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



SURGE CURRENT RATINGS

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

