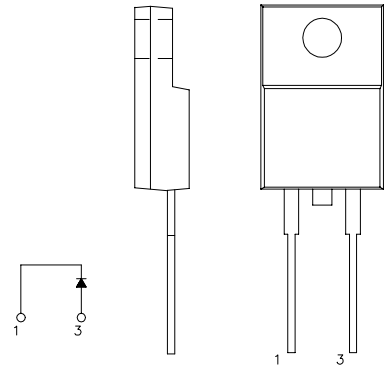


# DIODE Type : FSD20A90

OUTLINE DRAWING

## FEATURES

- \* Fully Molded Isolation Case
- \* Low Forward Voltage Drop
- \* Low Reverse Leakage Current
- \* High Surge Capability
- \* High Voltage



## Maximum Ratings

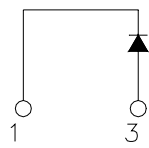
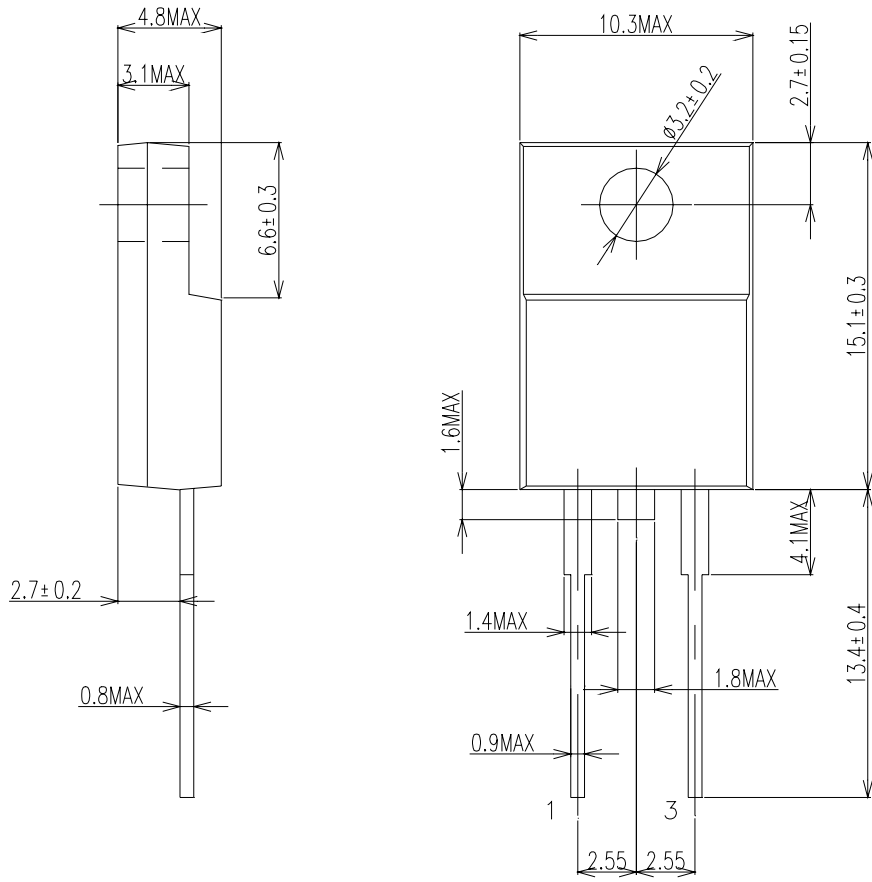
Approx Net Weight:1.7g

Rating	Symbol	FSD20A90		Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	900		V
Average Rectified Output Current	$I_O$	20	$T_c=102^\circ\text{C}$ 50 Hz Half Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	31.4		A
Surge Forward Current	$I_{FSM}$	200	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

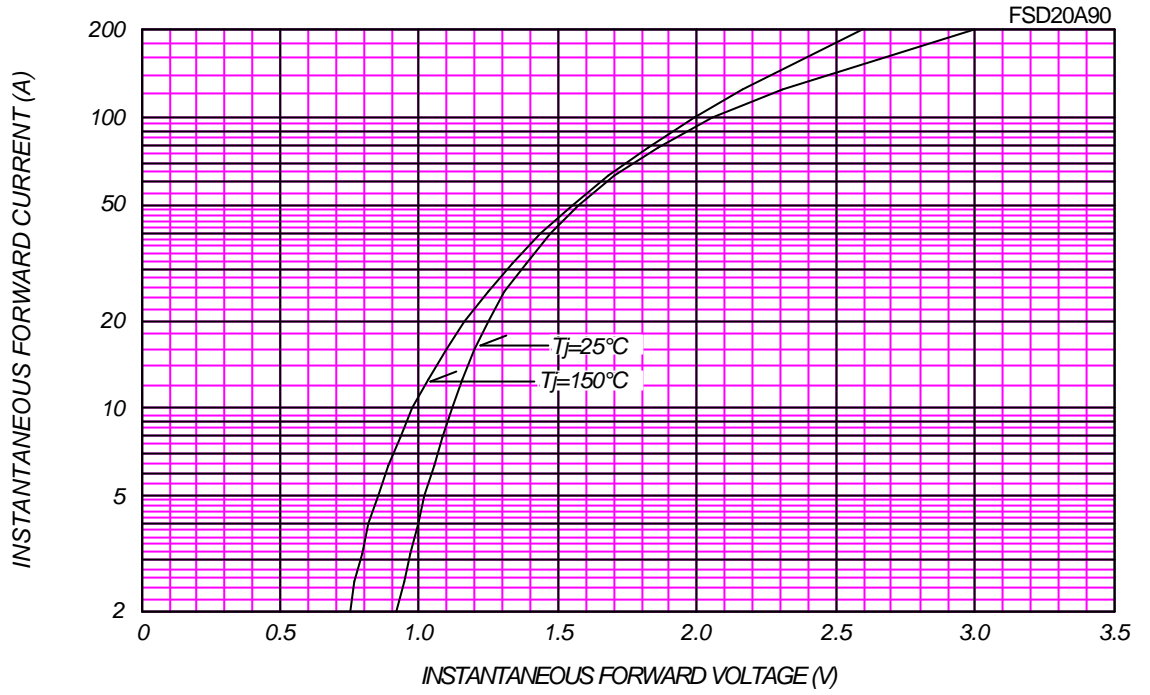
## Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	$I_{RM}$	$T_j= 25^\circ\text{C}$ , $V_{RM}= V_{RRM}$	-	-	50	$\mu\text{A}$
Peak Forward Voltage	$V_{FM}$	$T_j= 25^\circ\text{C}$ , $I_{FM}= 20\text{A}$	-	-	1.25	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	1.5	$^\circ\text{C/W}$
	$R_{th(c-f)}$	Case to Fin	-	-	1.5	

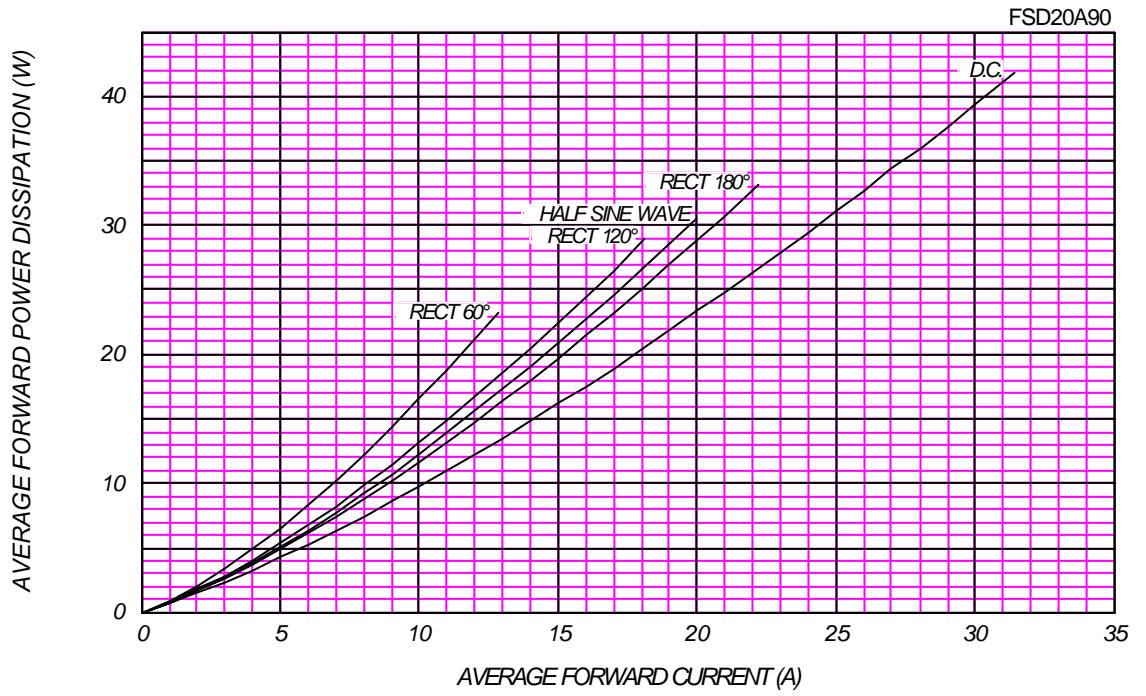
FSD20A90 OUTLINE DRAWING (Dimensions in mm)



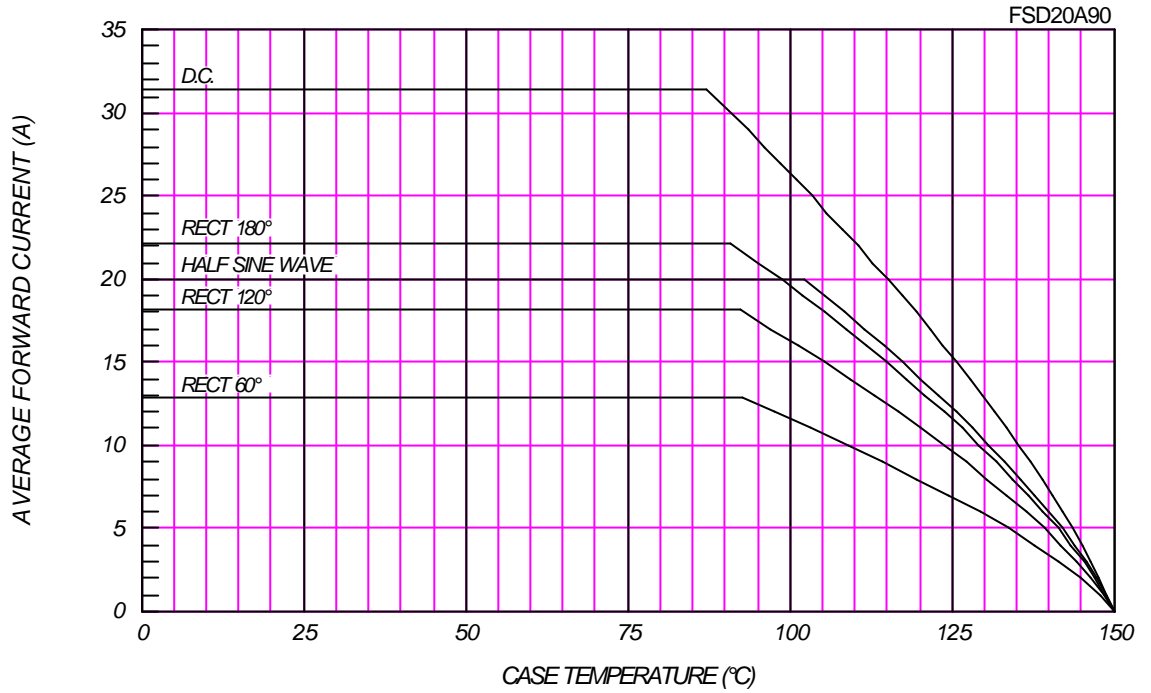
FORWARD CURRENT VS. VOLTAGE



AVERAGE FORWARD POWER DISSIPATION



### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



### SURGE CURRENT RATINGS

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

