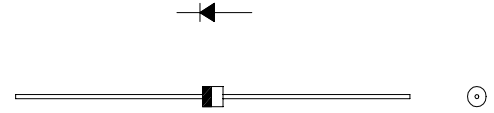


# FRD Type : 11EFS4

## OUTLINE DRAWING

### FEATURES

- \* Miniature Size
- \* Ultra-Fast Recovery
- \* Low Forward Voltage Drop
- \* Low Power Loss, High Efficiency
- \* High Surge Capability
- \* 200 Volts through 400 Volts Types Available
- \* 26mm and 52mm Inside Tape Spacing



### Maximum Ratings

Approx Net Weight:0.17g

Rating	Symbol	11EFS4		Unit	
Repetitive Peak Reverse Voltage	$V_{RRM}$	400		V	
Non-repetitive Peak Reverse Voltage	$V_{RSM}$	440		V	
Average Rectified Output Current	$I_O$	0.8	$T_a=30^{\circ}\text{C}$ Without Fin *1	50Hz Half Sine Wave Resistive Load	A
		1	$T_a=24^{\circ}\text{C}$ P.C.B.Mounted*2		
RMS Forward Current	$I_{F(RMS)}$	1.57		A	
Surge Forward Current	$I_{FSM}$	30	50Hz 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		$^{\circ}\text{C}$	

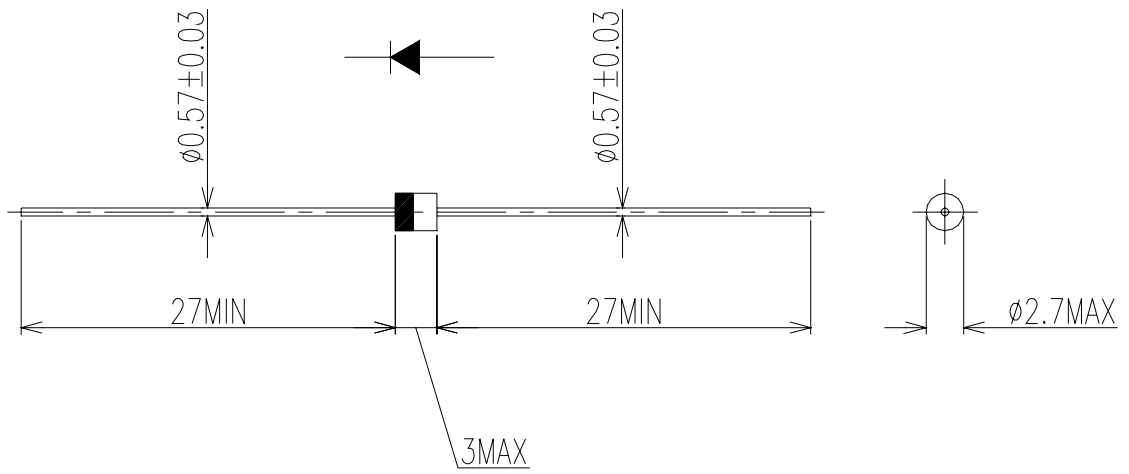
### Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min	Typ	Max	Unit
Peak Reverse Current	$I_{RM}$	$T_j= 25^{\circ}\text{C}$ , $V_{RM}= V_{RRM}$	-	-	20	$\mu\text{A}$
Peak Forward Voltage	$V_{FM}$	$T_j= 25^{\circ}\text{C}$ , $I_{FM}= 1\text{ A}$	-	-	1.25	V
Reverse Recovery Time	trr	$I_{FM}= 1\text{ A}$ , $-di/dt= 50\text{ A}/\mu\text{s}$ , $T_a= 25^{\circ}\text{C}$	-	-	30	ns
Thermal Resistance	$R_{th(j-a)}$	Junction to Ambient	Without Fin,PCB *1		140	$^{\circ}\text{C}/\text{W}$
			P.C.Board Mounted *2		110	

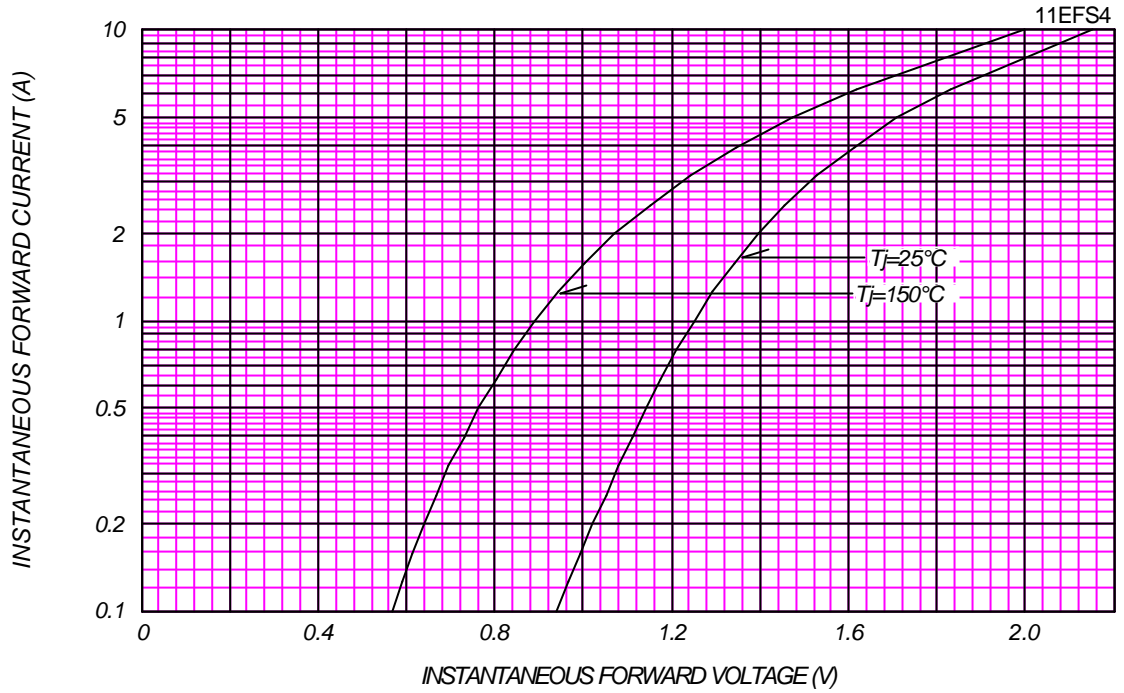
\*1 Without Fin or P.C.Board

\*2 P.C. Board Mounted(L=3mm, Print Lands = 5x5 mm,Both Sides)

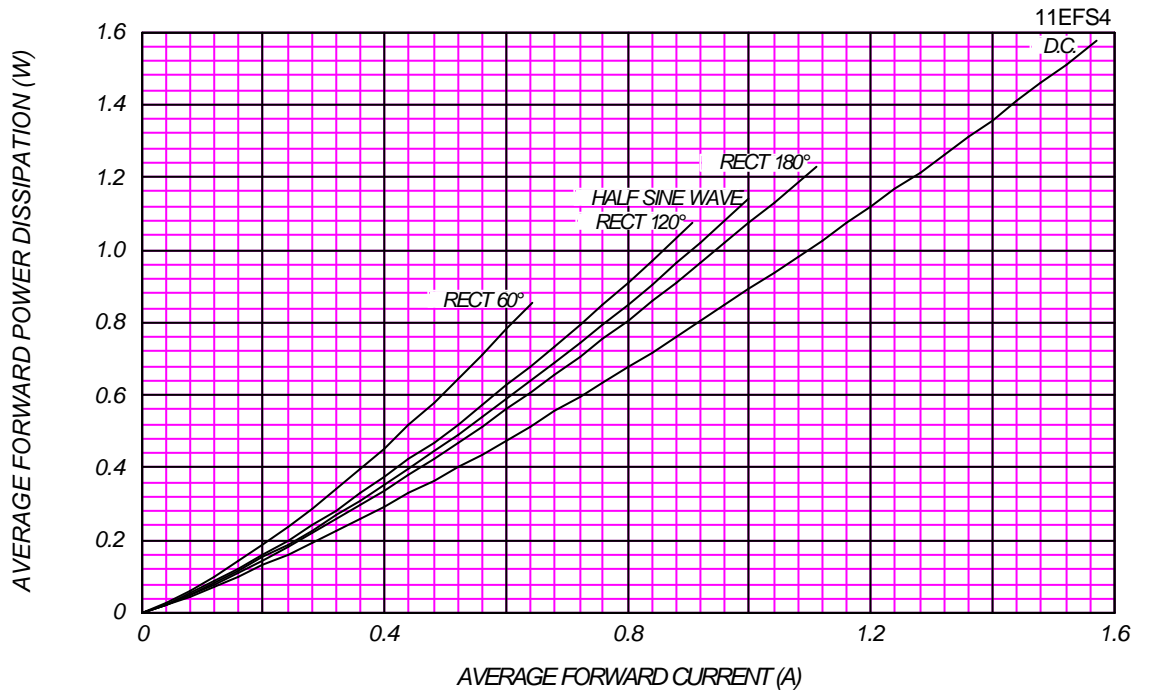
11EFS4 OUTLINE DRAWING (Dimensions in mm)



FORWARD CURRENT VS. VOLTAGE



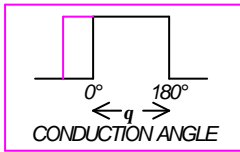
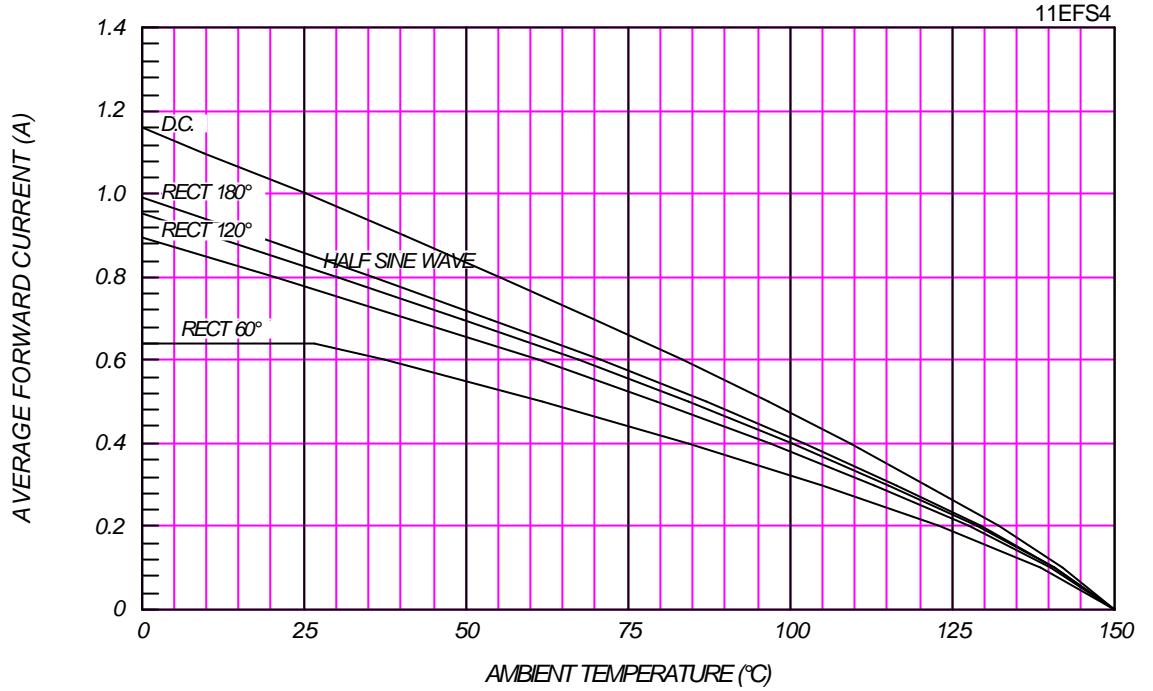
AVERAGE FORWARD POWER DISSIPATION





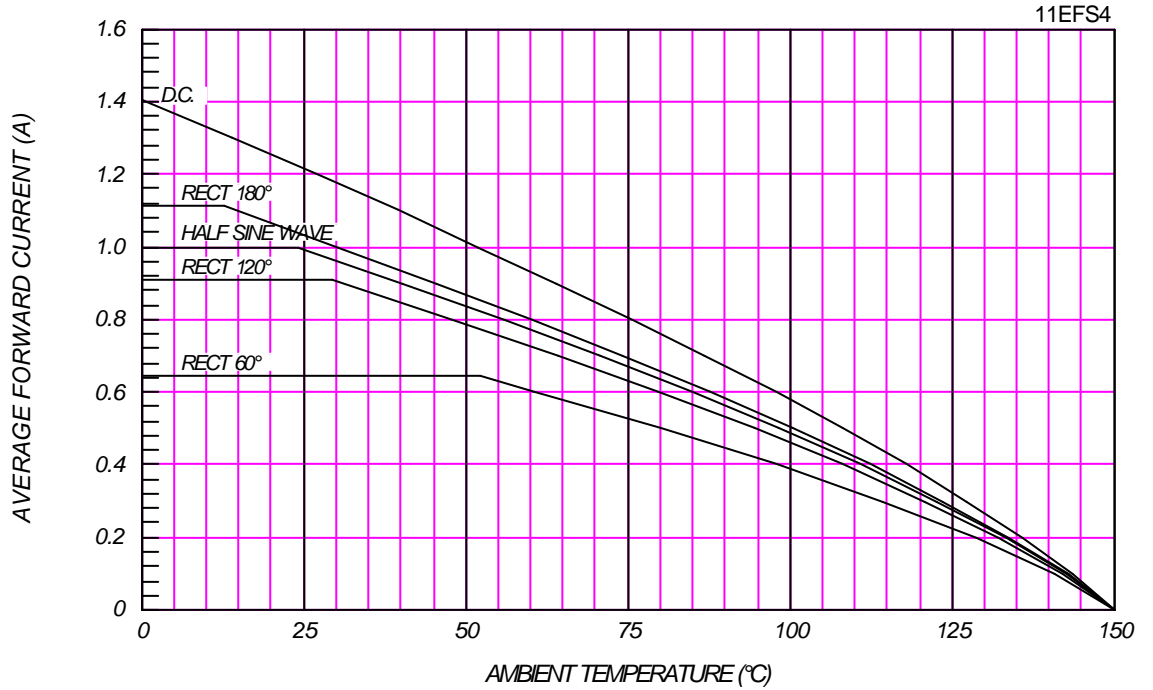
### AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Without Fin or P.C. Board



### AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

P.C. Board mounted (L=3mm, Print Land=5x5mm, Both Sides)



### SURGE CURRENT RATINGS

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

11EFS4

