

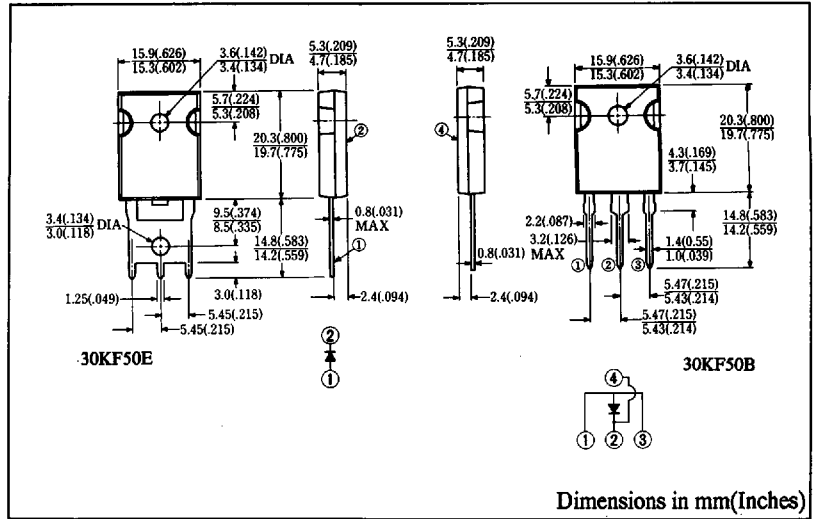
# FAST RECOVERY DIODE

33A/500V/trr:70nsec

30KF50E  
30KF50B

## FEATURES

- Similar to TO-247AC Case
- Ultra - Fast Recovery
- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capability
- 100 Volts thru 600 Volts Types Available



Approx. Net Weight : 5.55 Grams

## MAXIMUM RATINGS

Voltage Rating	TYPE	◆ 30KF50E ◆ 30KF50B		Unit
	Symbol			
Repetitive Peak Reverse Voltage	$V_{RRM}$	500		V
Electrical Rating	Symbol	Condition	Rating	Unit
Average Rectified Out put Current (resistive load)	$I_o$	180° rectangular wave conduction $T_c=78^\circ C$	33	A
		180° sinusoidal wave conduction $T_c=89^\circ C$	30	A
RMS Forward Current	$I_F (RMS)$		47	A
Peak One-cycle Forward Surge Current	$I_{FSM}$	50Hz half sine wave, non - repetitive	450	A
Operating Junction Temperature Range	$T_{jw}$		- 40 to 150	°C
Storage Temperature Range	$T_{stg}$		- 40 to 150	°C
Mounting Torque	$F_{tor}$	Recommended torque	0.5 (5.1)	N•m (kgf•cm)

## ELECTRICAL & THERMAL CHARACTERISTICS

Characteristics	Symbol	Test Condition	Max.	Unit
Peak Forward Voltage	$V_{FM}$	$I_{FM}=30A, T_j=25^\circ C$	1.4	V
Peak Reverse Current	$I_{RM}$	$V_{RM}=V_{RRM}, T_j=25^\circ C$	50	$\mu A$
Reverse Recovery Time	$t_{rr}$	$I_{FM}=10A, -di/dt=50A/\mu s, T_j=25^\circ C$	70	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	1.4	°C/W

◆ For spare parts only

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FIG. 1- FORWARD VOLTAGE  
VS. FORWARD CURRENT

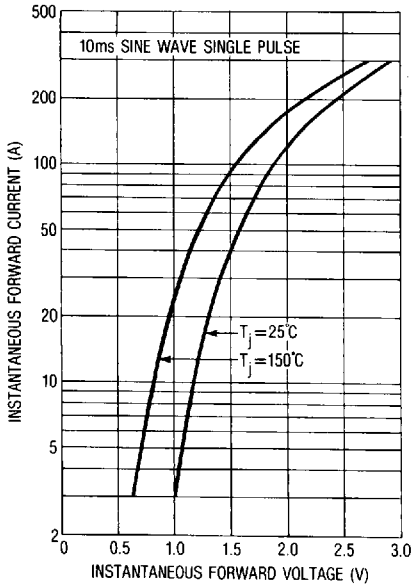


FIG. 2- AVERAGE FORWARD POWER  
DISSIPATION

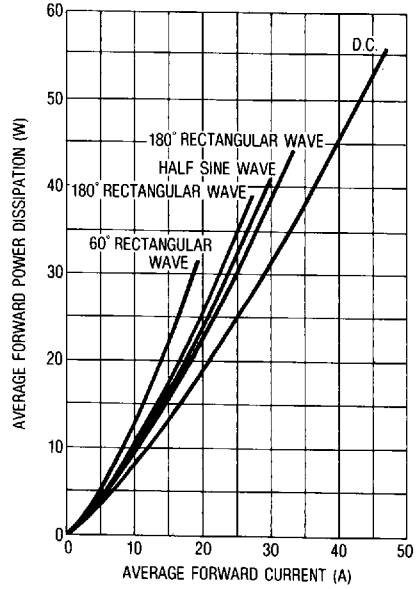


FIG. 3- AVERAGE FORWARD CURRENT  
VS. CASE TEMPERATURE

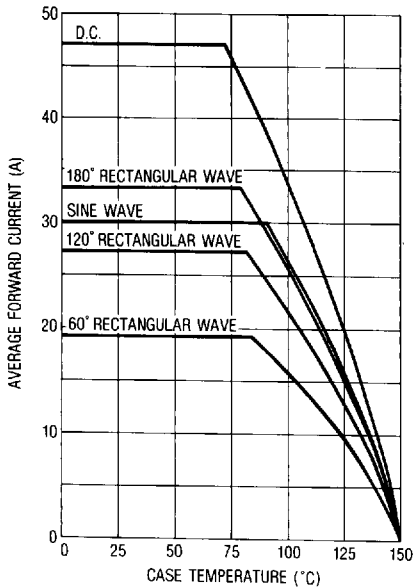


FIG. 4- SURGE CURRENT RATINGS

