

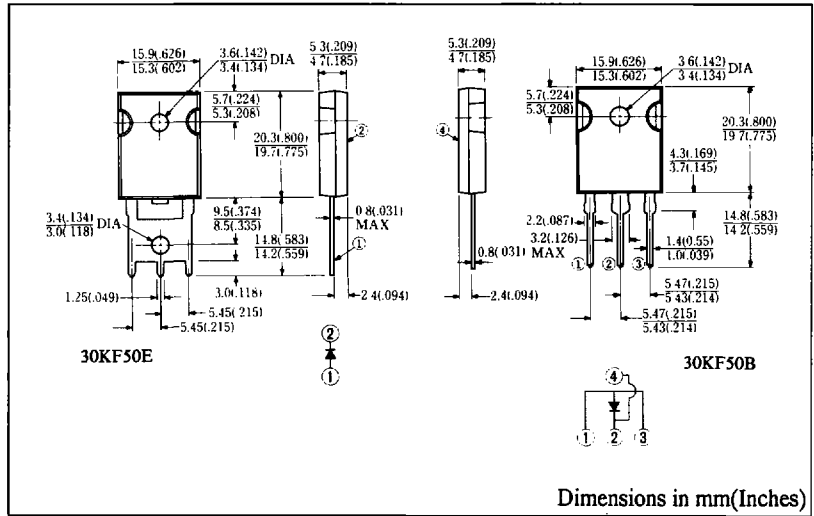
FAST RECOVERY DIODE

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 Symbol	◆ 30KF50E ◆ 30KF50B		Unit
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 $T_C=78^\circ\text{C}$	33	A
		180° sinusoidal wave conduction $T_C=89^\circ\text{C}$	30	
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	$^\circ\text{C}$
Storage Temperature Range	T_{stg}		- 40 to 150	$^\circ\text{C}$
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}	$I_{FM}=30A$, $T_j=25^\circ\text{C}$	1.4	V
Peak Reverse Current	I_{RM}	$V_{RM}=V_{RRM}$, $T_j=25^\circ\text{C}$	50	μA
Reverse Recovery Time	t_{rr}	$I_{FM}=10A$, $-di/dt=50A/\mu\text{s}$, $T_j=25^\circ\text{C}$	70	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	1.4	$^\circ\text{C}/\text{W}$

◆ For spare parts only

FIG. 1- FORWARD VOLTAGE VS. FORWARD CURRENT

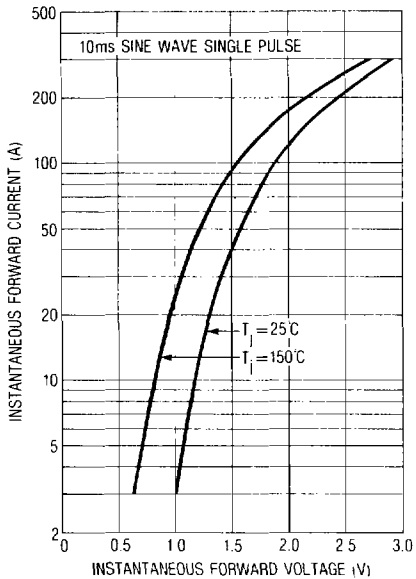


FIG. 2- AVERAGE FORWARD POWER DISSIPATION

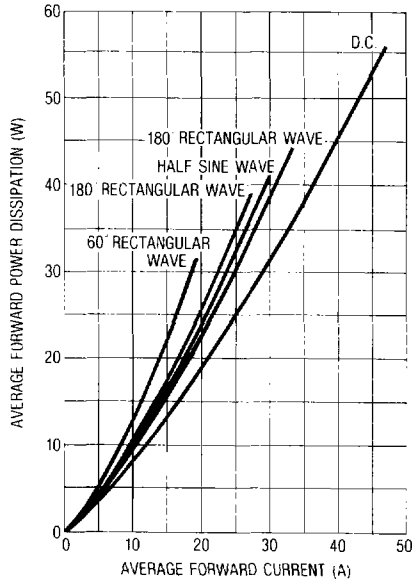


FIG. 3- AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

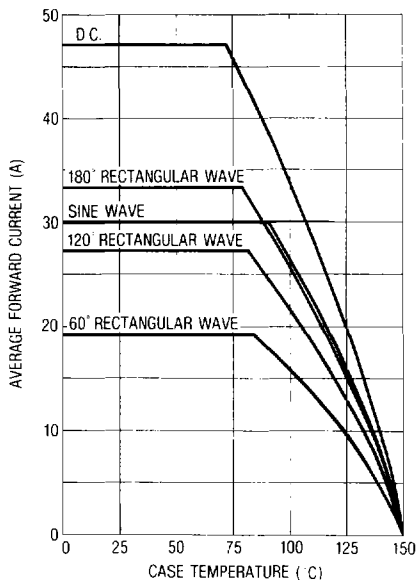


FIG. 4- SURGE CURRENT RATINGS

