

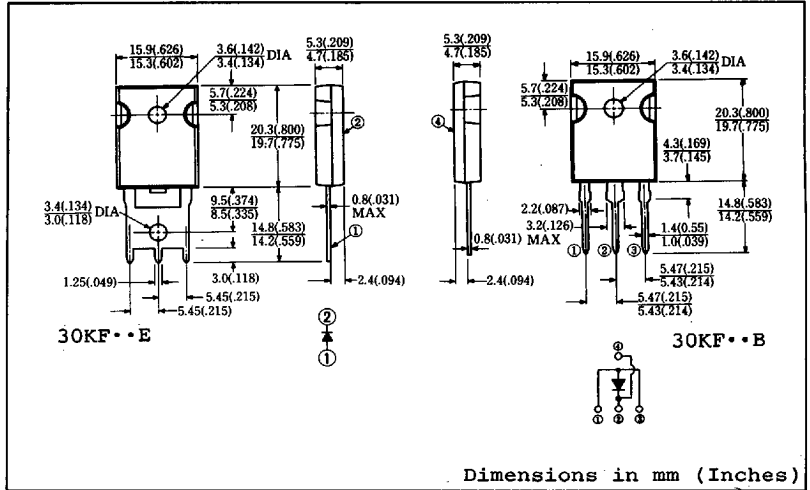
FAST RECOVERY DIODE

33A/300~400V/trr: 60nsec

30KF30E 30KF40E
30KF30B 30KF40B

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: 6 Grams

5.55 Grams

MAXIMUM RATINGS

Voltage Rating	TYPE	◆ 30KF30E	30KF40E	Unit	
	Symbol	◆ 30KF30B	30KF40B		
Repetitive Peak Reverse Voltage	V_{RRM}	300	400	v	
Non-Repetitive Peak Reverse Voltage	V_{RSM}	330	440	v	
Electrical Rating	Symbol	Condition		Rating	Unit
Average Rectified Output Current	I_o	180° rectangular wave conduction $T_c = 83^\circ C$		33	A
		180° sinusoidal wave conduction $T_c = 94^\circ C$		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	°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}	$I_{FM} = 30A$ $T_j = 25^\circ C$	1.25	v
Peak Reverse Current	I_{RM}	$V_{RM} = V_{RRM}$ $T_j = 25^\circ C$	50	μA
Reverse Recovery Time	t_{rr}	$I_{FM} = 10A$ $-di/dt = 50A/\mu s$ $T_j = 25^\circ C$	60	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

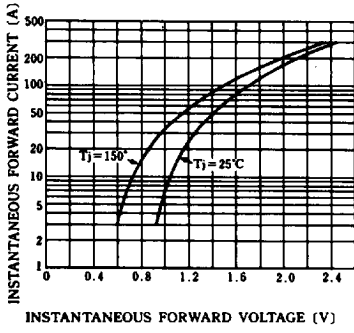


FIG.2-AVERAGE FORWARD POWER DISSIPATION

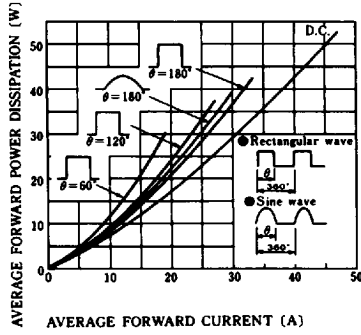


FIG.3-AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

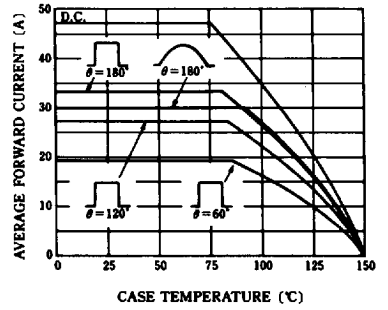
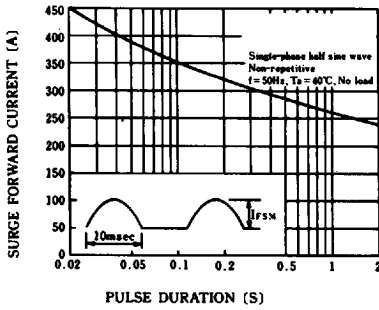


FIG.4-SURGE CURRENT RATINGS



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