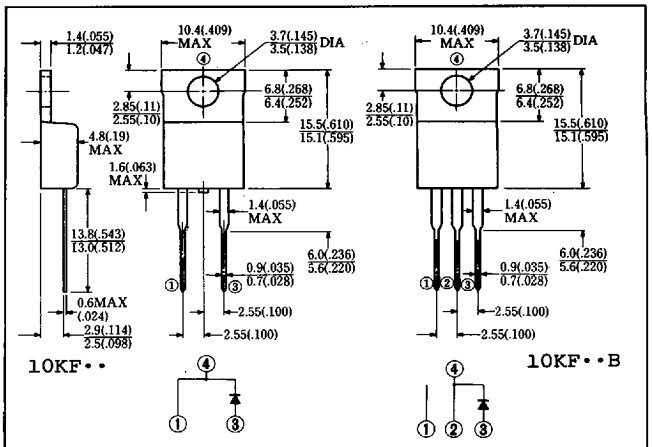
FAST RECOVERY DIODE 11A/300～400V/trr : 45nsec

10KF30 F10KF30 10KF40 F10KF40
10KF30B F10KF30B 10KF40B F10KF40B

FEATURES

- Similar to TO-220AC and TO-220AB Case
- Fully Molded Isolation Case (F - Type)
- 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: 1.85 Grams 1.9 Grams

MAXIMUM RATINGS

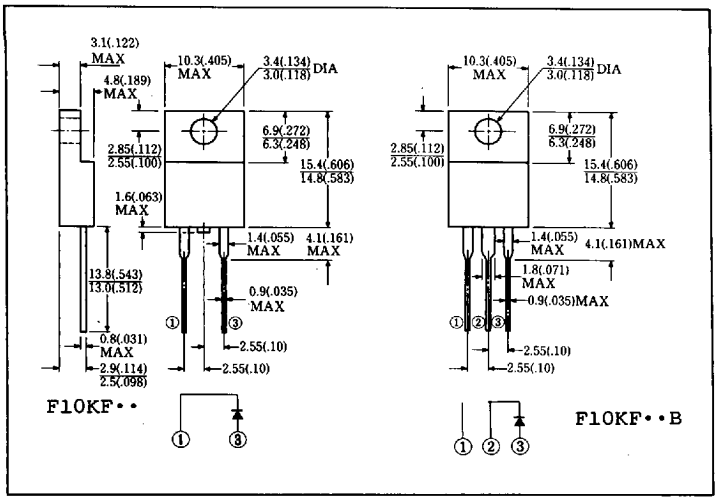
Voltage Rating	TYPE / Symbol	◆10KF30 ◆F10KF30 ◆10KF30B ◆F10KF30B	10KF40 F10KF40 10KF40B F10KF40B	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	300	400	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	330	440	V

Electrical Rating	Symbol	Condition	Rating	Unit
Average Rectified Output Current	I_o	180° rectangular wave conduction T_C = 84°C	11	A
		180° sinusoidal wave conduction T_C = 95°C	10	
RMS Forward Current	$I_{F(RMS)}$		15.7	A
Peak One-cycle Forward Surge Current	I_{FSM}	50Hz half sine wave, non-repetitive	120	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}=10A T_j = 25°C	1.30	V
Peak Reverse Current	I_{RM}	V_{RM} = V_{RRM} T_j = 25°C	30	μA
Reverse Recovery Time	t_{rr}	I_{FM}=10A -di/dt = 50A/μs T_j = 25°C	45	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	4	°C/W
	$R_{th(c-f)}$	Case to Fin	1.5	

◆ For spare parts only



1.7 Grams 1.75 Grams

FIG.1-FORWARD VOLTAGE VS. FORWARD CURRENT

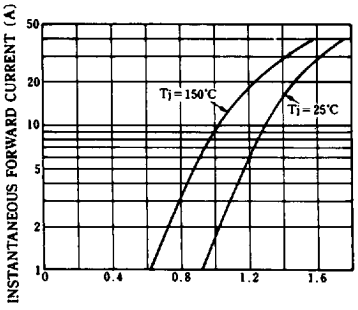


FIG.2-AVERAGE FORWARD POWER DISSIPATION

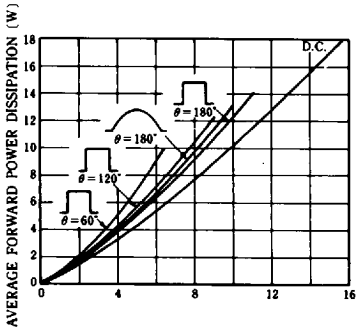


FIG.3-AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

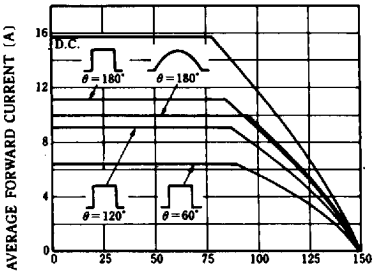


FIG.4-SURGE CURRENT RATINGS