

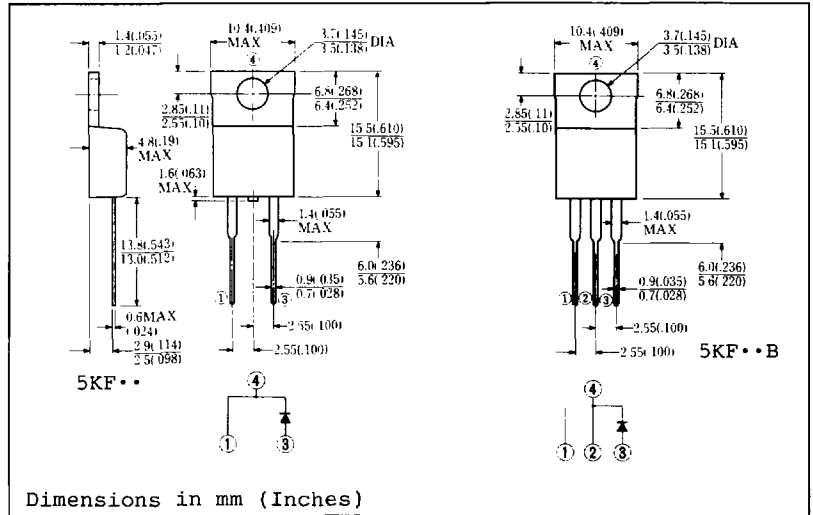
# FAST RECOVERY DIODE

5.5A/100~200V/trr:35nsec

5KF10 F5KF10 5KF20 F5KF20  
5KF10B F5KF10B 5KF20B F5KF20B

## 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

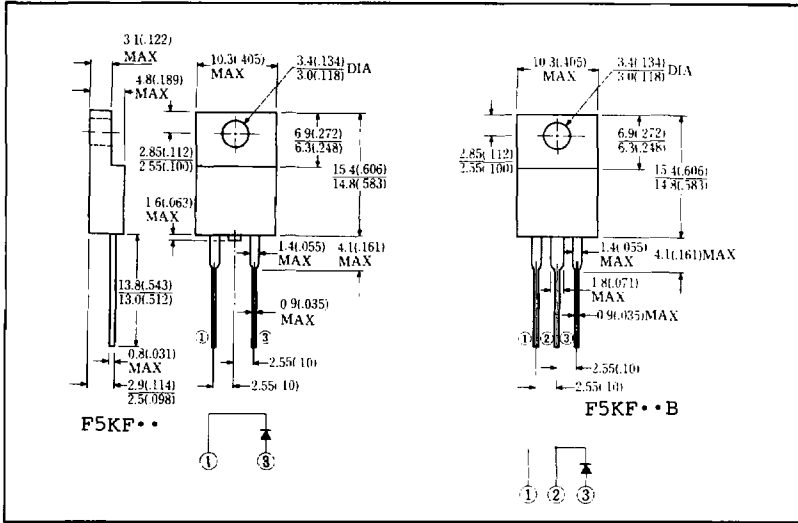
## MAXIMUM RATINGS

Voltage Rating	TYPE Symbol	◆5KF10	◆F5KF10	5KF20	F5KF20	Unit
		◆5KF10B	◆F5KF10B	5KF20B	F5KF20B	
Repetitive Peak Reverse Voltage	$V_{RRM}$	100		200		v
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	110		220		v
Electrical Rating	Symbol	Condition			Rating	Unit
Average Rectified Output Current	$I_O$	180° rectangular wave conduction $T_c = 117^\circ\text{C}$			5.5	A
		180° sinusoidal wave conduction $T_c = 122^\circ\text{C}$			5.0	
RMS Forward Current	$I_{F(RMS)}$				7.9	A
Peak One-cycle Forward Surge Current	$I_{FSM}$	50Hz half sine wave, non-repetitive			80	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	$V_{FM}$	$I_{FM} = 5A$ $T_j = 25^\circ\text{C}$	0.98	v
Peak Reverse Current	$I_{RM}$	$V_{RM} = V_{RRM}$ $T_j = 25^\circ\text{C}$	20	$\mu\text{A}$
Reverse Recovery Time	$t_{rr}$	$I_{FM} = 5A$ $-di/dt = 50A/\mu\text{s}$ $T_j = 25^\circ\text{C}$	35	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	5	°C/W
	$R_{th(c-f)}$	Case to Fin for F5KF type	1.5	

◆ For spare parts only



1.7 Grams

1.75 Grams

FIG.1-FORWARD VOLTAGE VS. FORWARD CURRENT

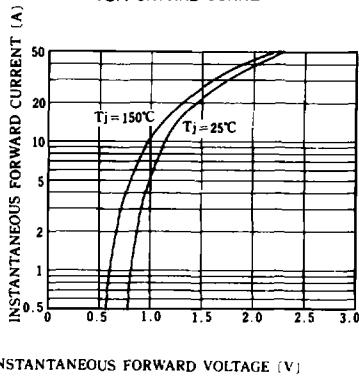


FIG.2-AVERAGE FORWARD POWER DISSIPATION

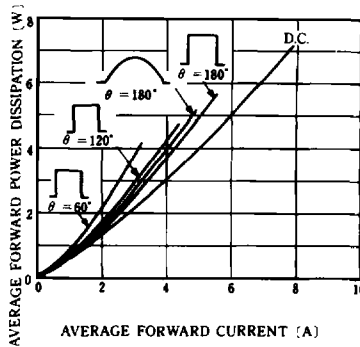


FIG.3-AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

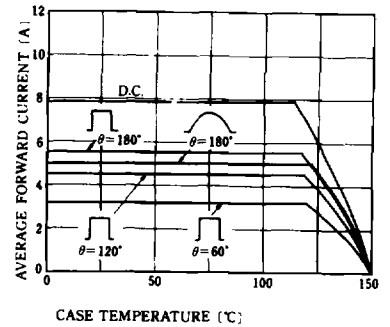


FIG.4-SURGE CURRENT RATINGS

