

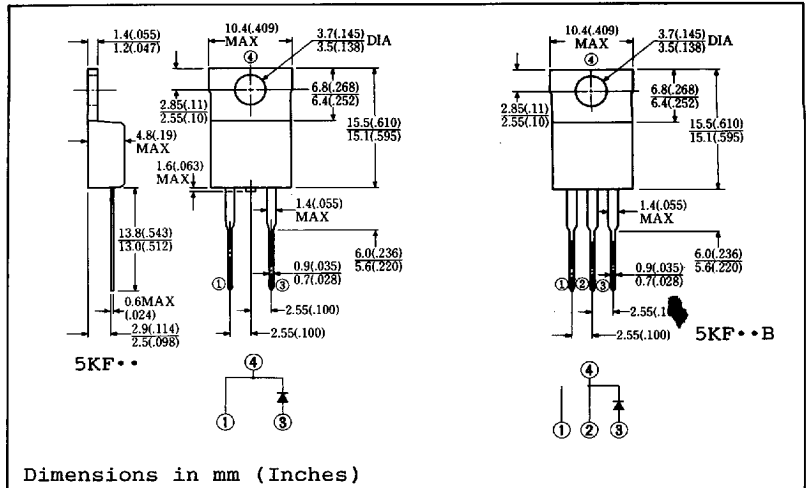
FAST RECOVERY DIODE

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

5KF10 5KF10B 5KF20 5KF20B
 F5KF10 F5KF10B F5KF20 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	◆5KF10	◆F5KF10	5KF20	F5KF20	Unit
	Symbol	◆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 $T_C = 117^\circ C$			5.5	A
		180° sinusoidal wave conduction $T_C = 122^\circ C$			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

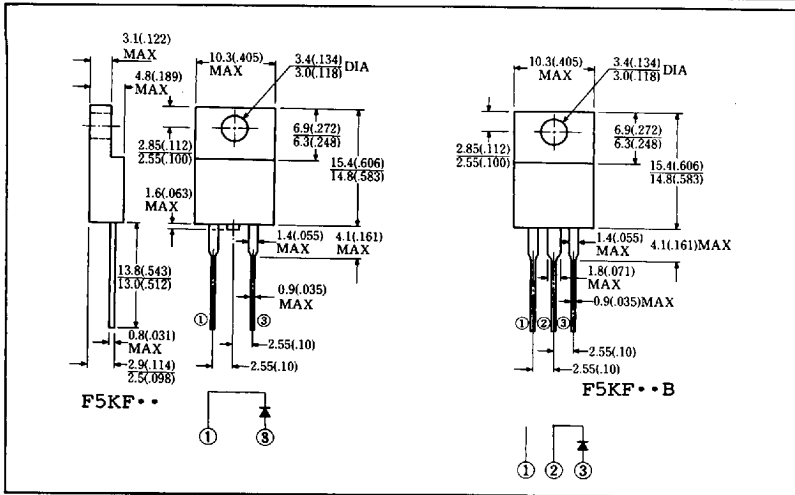
Characteristics	Symbol	Test Condition	Max.	Unit
Peak Forward Voltage	V_{FM}	$I_{FM} = 5A$ $T_j = 25^\circ C$	0.98	V
Peak Reverse Current	I_{RM}	$V_{RM} = V_{RRM}$ $T_j = 25^\circ C$	20	μA
Reverse Recovery Time	t_{rr}	$I_{FM} = 5A$ $-di/dt = 50A/\mu s$ $T_j = 25^\circ C$	35	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	5	°C/W
	$R_{th(c-f)}$	Case to Fin for F5KF type	1.5	

◆ For spare parts only

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Nihon Inter Electronics Corporation

480



1.7 Grams

1.75 Grams

FIG.1-FORWARD VOLTAGE VS. FORWARD CURRENT

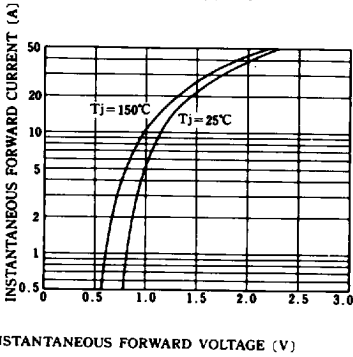


FIG.2-AVERAGE FORWARD POWER DISSIPATION

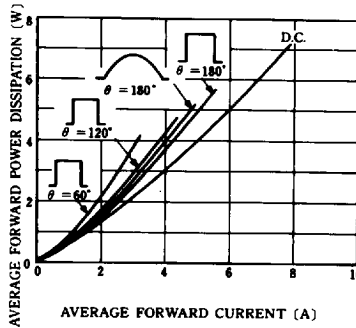


FIG.3-AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

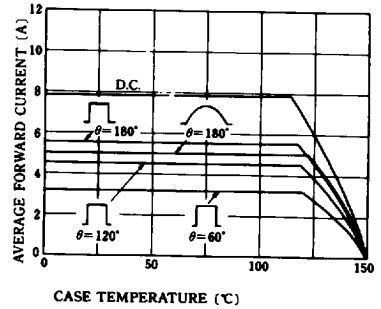
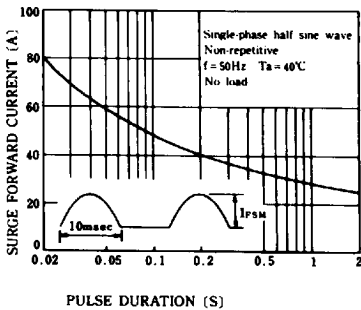


FIG.4-SURGE CURRENT RATINGS



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