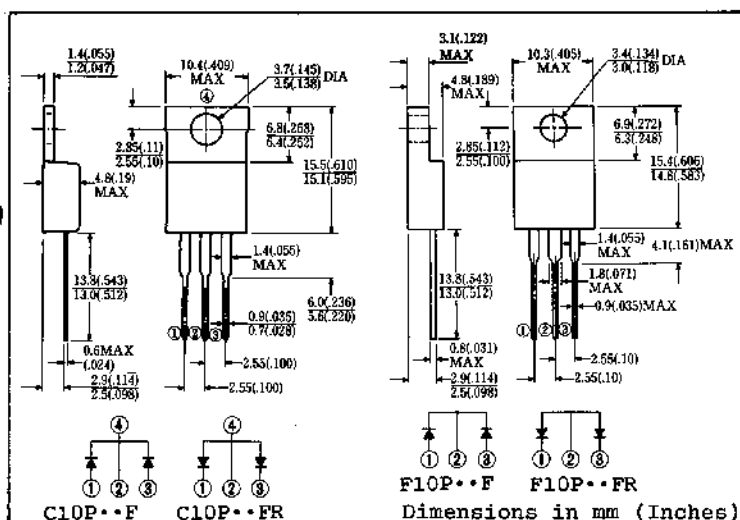


FAST RECOVERY DIODE 11A/300~400V/trr: 45 nsec

C10P30F C10P40F F10P30F F10P40F
C10P30FR C10P40FR F10P30FR F10P40FR

FEATURES

- Similar to TO-220AB Case
- Fully Mold Isolation (F-Type)
- Dual Diodes - Cathode Common and Anode Common (Type - R)
- Ultra - Fast Recovery
- Low Forward Voltage Drop
- High Surge Capability
- 100 Volts thru 600 Volts Types Available



MAXIMUM RATINGS

Voltage Rating	TYPE Symbol	◆C10P30F ◆F10P30F ◆C10P30FR ◆F10P30FR	C10P40F F10P40F C10P40FR F10P40FR	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	Full rectangular wave conduction $T_C = 105^\circ\text{C}$	11	A
		Full sinusoidal wave conduction $T_C = 112^\circ\text{C}$	10	
RMS Forward Current	$I_{F(RMS)}$		11	A
Peak One-cycle Forward Surge Current	I_{FSM}	50Hz full sine wave, non-repetitive	80	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

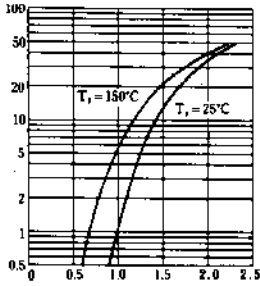
Characteristics	Symbol	Test Condition	Max.	Unit
Peak Forward Voltage	V_{FM}	$I_{FM} = 5A$ $T_j = 25^\circ\text{C}$ per diode leg	1.25	V
Peak Reverse Current	I_{RM}	$V_{RM} = V_{RRM}$ $T_j = 25^\circ\text{C}$ per diode leg	30	μA
Reverse Recovery Time	t_{rr}	$I_{FM} = 5A$ $-di/dt = 50A/\mu\text{s}$ $T_j = 25^\circ\text{C}$	45	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	3	$^\circ\text{C/W}$
	$R_{th(c-f)}$	Case to Fin for F10P type	1.5	

◆For spare parts only

6615123 0002255 678

FIG.1-FORWARD VOLTAGE
VS. FORWARD CURRENT

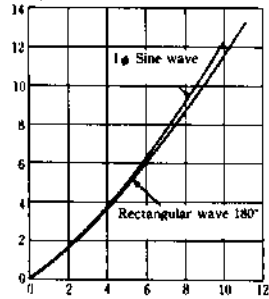
INSTANTANEOUS FORWARD CURRENT (A)



INSTANTANEOUS FORWARD VOLTAGE (V)

FIG.2-AVERAGE FORWARD POWER
DISSIPATION

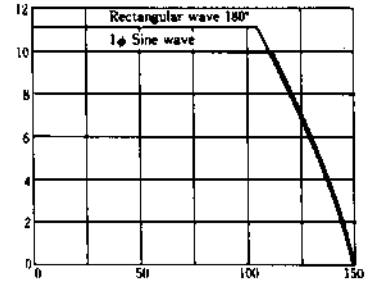
AVERAGE FORWARD POWER DISSIPATION (W)



AVERAGE FORWARD CURRENT (A)

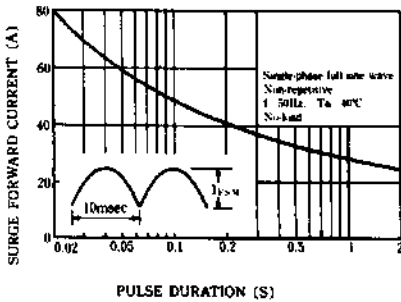
FIG.3-AVERAGE FORWARD CURRENT
VS. CASE TEMPERATURE

AVERAGE FORWARD CURRENT (A)



CASE TEMPERATURE ($^\circ\text{C}$)

FIG.4-SURGE CURRENT RATINGS



PULSE DURATION (S)

F