

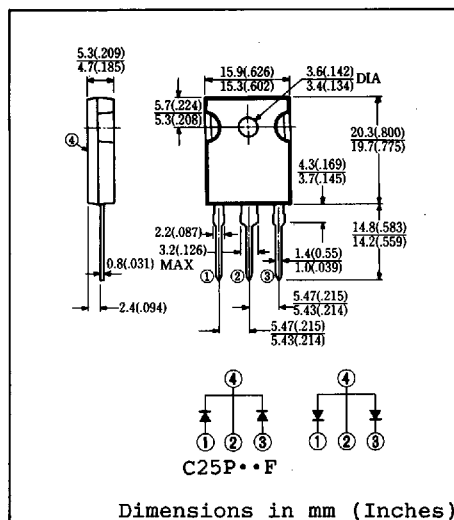
# FAST RECOVERY DIODE

27.7A/100~200V/trr: 50nsec

C25P10F C25P20F  
C25P10FR C25P20FR

## FEATURES

- Similar to TO-247AC (TO-3P) Case
- Dual Diodes - Cathode Common and Anode Common (Type - R)
- Ultra - Fast Recovery
- Low Forward Voltage Drop
- High Surge Capability
- 100 Volts thru 400 Volts Types Available



Approx. Net Weight: 5.55 Grams

## MAXIMUM RATINGS

Voltage Rating	TYPE	◆C25P10F ◆C25P10FR	C25P20F C25P20FR	Unit	
	Symbol				
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	$I_O$	Full rectangular wave conduction $T_c = 84^\circ C$		27.7	A
		Full sinusoidal wave conduction $T_c = 93^\circ C$		25	
RMS Forward Current	$I_{F(RMS)}$			28	A
Peak One-cycle Forward Surge Current	$I_{FSM}$	50Hz full sine wave, non-repetitive		150	A
Operating Junction Temperature Range	$T_{jw}$			-40 to 150	$^\circ C$
Storage Temperature Range	$T_{stg}$			-40 to 150	$^\circ C$
Mounting Torque	$F_{tor}$	Recommended torque		0.5 (5.1)	$N \cdot m$ (kgf $\cdot$ cm)

## ELECTRICAL & THERMAL CHARACTERISTICS

Characteristics	Symbol	Test Condition	Max.	Unit
Peak Forward Voltage	$V_{FM}$	$I_{FM} = 12.5A$ $T_j = 25^\circ C$ per diode leg	0.98	v
Peak Reverse Current	$I_{RM}$	$V_{RM} = V_{RRM}$ $T_j = 25^\circ C$ per diode leg	25	$\mu A$
Reverse Recovery Time	$t_{rr}$	$I_{FM} = 10A$ $-di/dt = 50A/\mu s$ $T_j = 35^\circ C$	50	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	2	$^\circ C/W$

◆ For spare parts only

FIG.1-FORWARD VOLTAGE VS. FORWARD CURRENT

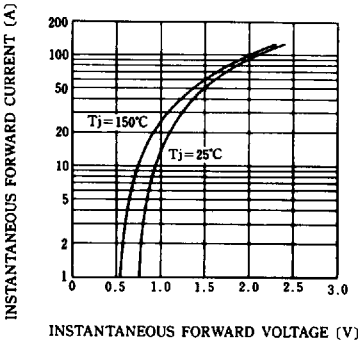


FIG.2-AVERAGE FORWARD DISSIPATION

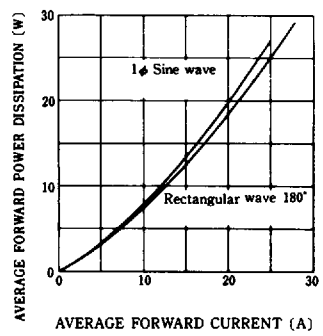


FIG.3-AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

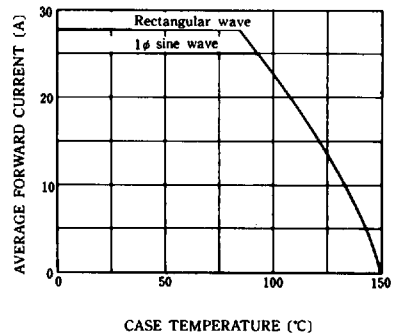


FIG.4-SURGE CURRENT RATINGS

