

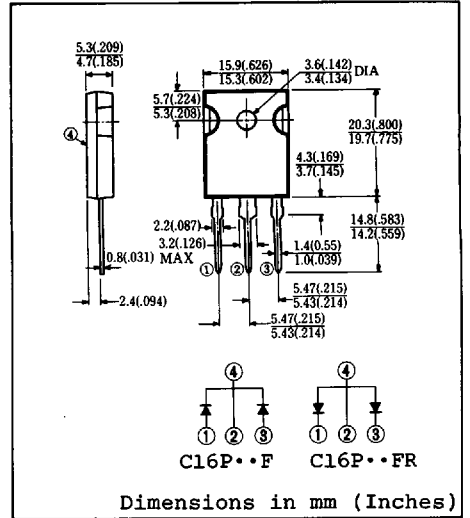
FAST RECOVERY DIODE

17.7A/300~400V/trr: 45nsec

C16P30F C16P40F
C16P30FR C16P40FR

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 600 Volts Types Available



Approx. Net Weight : 5.55 Grams

MAXIMUM RATINGS

Voltage Rating	TYPE	♦C16P30F ♦C16P30FR	C16P40F C16P40FR	Unit	
	Symbol				
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 $T_C = 101^\circ\text{C}$		17.7	A
		Full sinusoidal wave conduction $T_C = 109^\circ\text{C}$		16	
RMS Forward Current	$I_{F(RMS)}$			18	A
Peak One-cycle Forward Surge Current	I_{FSM}	50Hz full sine wave, non-repetitive		120	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)	$\frac{\text{N}\cdot\text{m}}{(\text{kgf}\cdot\text{cm})}$

ELECTRICAL & THERMAL CHARACTERISTICS

Characteristics	Symbol	Test Condition	Max.	Unit
Peak Forward Voltage	V_{FM}	$I_{FM} = 8\text{A}$ $T_j = 25^\circ\text{C}$ 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}	$I_{FM} = 8\text{A}$ $-di/dt = 50\text{A}/\mu\text{s}$ $T_j = 25^\circ\text{C}$	45	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	2	$^\circ\text{C}/\text{W}$

♦ For spare parts only

6615123 0002263 744

FIG.1-FORWARD VOLTAGE
VS. FORWARD CURRENT

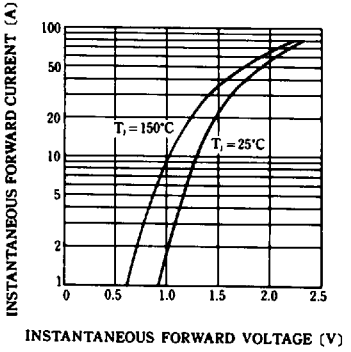


FIG.2-AVERAGE FORWARD
POWER DISSIPATION

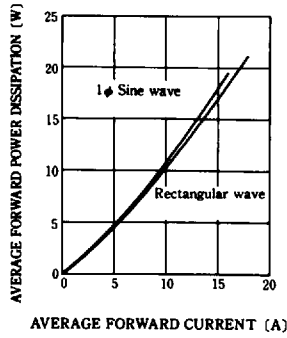


FIG.3-AVERAGE FORWARD CURRENT
VS. CASE TEMPERATURE

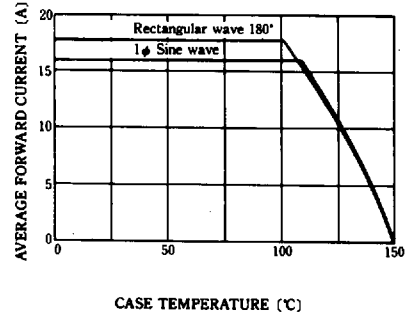


FIG.4-SURGE CURRENT RATINGS

