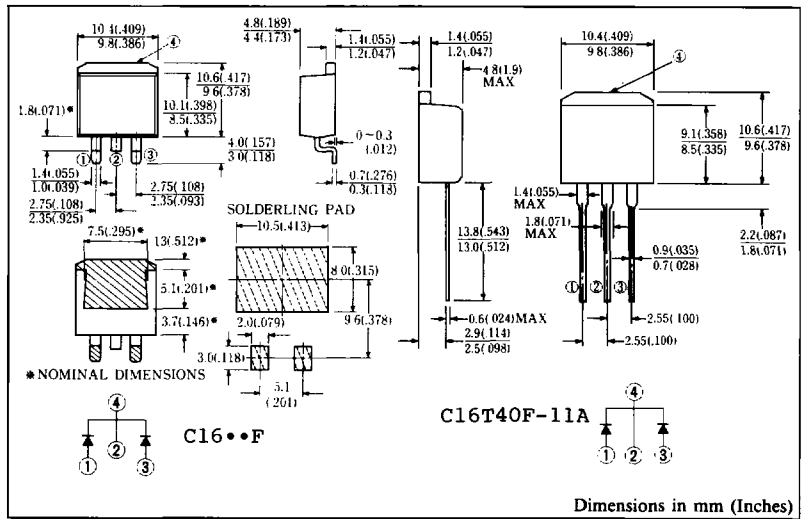


# FAST RECOVERY DIODE

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

C16T30F C16T40F  
C16T40F-11A

- **SQUARE - PAK** TO-263AB (SMD)  
Packaged in 24mm Tape and Reel : C16T••F
- Tableless TO-220:C16T40F-11A
- Dual Diodes - Cathode Common
- Ultra - Fast Recovery
- Low Forward Voltage Drop
- High Surge Capability
- 100 Volts thru 600 Volts Types Available



## MAXIMUM RATINGS

Voltage Rating	TYPE	♦ C16T30F	C16T40F C16T40F-11A	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	$^\circ\text{C}$

## 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	$\mu\text{A}$
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

FIG.1-FORWARD VOLTAGE  
VS. FORWARD CURRENT

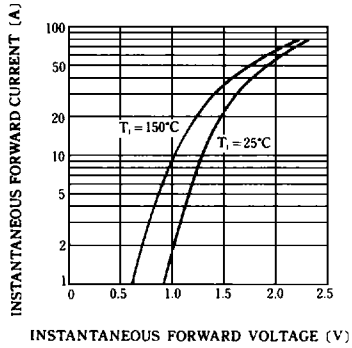


FIG.2-AVERAGE FORWARD  
POWER DISSIPATION

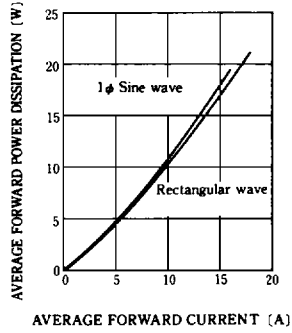


FIG.3-AVERAGE FORWARD CURRENT  
VS. CASE TEMPERATURE

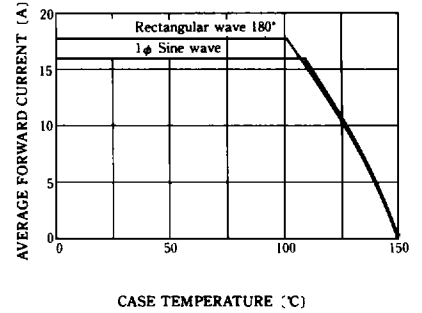


FIG.4-SURGE CURRENT RATINGS

