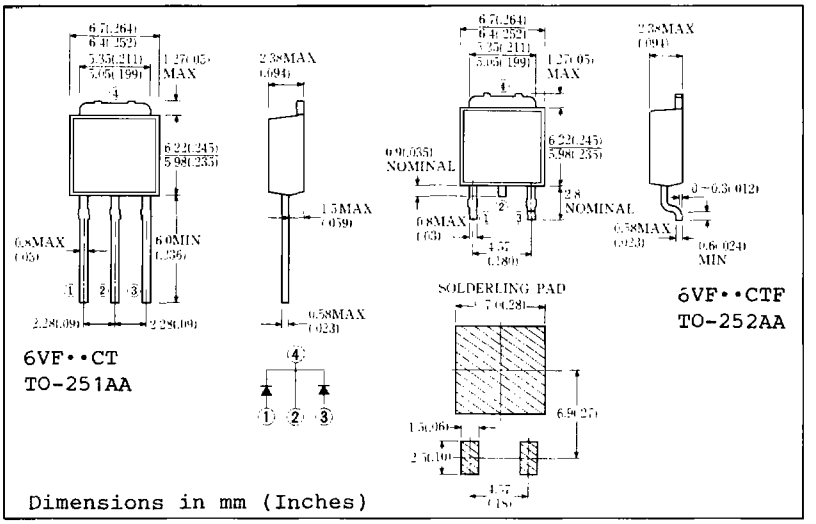
FAST RECOVERY DIODE

6.6A/300～400V/trr : 30nsec

6VF30CT 6VF40CT
6VF30CTF 6VF40CTF

FEATURES

- TO-251AA Case
- TO-252AA Case, Surface Mount Device
- Ultra - Fast Recovery
- Dual Diodes - Cathode Common
- Low Forward Voltage Drop
- High Surge Capability
- 100 Volts thru 600 Volts Types Available
- Packaged in 16mm Tape and Reel (TO-252AA Case)



Approx. Net Weight: 0.35 Grams 0.3 Grams

MAXIMUM RATINGS

Voltage Rating	TYPE / Symbol	◆6VF30CT ◆6VF30CTF	6VF40CT 6VF40CTF	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 = 104°C	6.6	A
		Full sinusoidal wave conduction	T_C = 109°C	6.0	
			PCB mounted* T_a = 26°C	1.7	
RMS Forward Current	$I_{F(RMS)}$			6.66	A
Peak One-cycle Forward Surge Current	I_{FSM}	50Hz full sine wave, non-repetitive		45	A
Operating Junction Temperature Range	T_{jw}			-40 to 150	°C
Storage Temperature Range	T_{stg}			-40 to 150	°C

ELECTRICAL & THERMAL CHARACTERISTICS

Characteristics	Symbol	Test Condition	Max.	Unit
Peak Forward Voltage	V_{FM}	I_{FM} = 3A T_j = 25°C per diode leg	1.25	V
Peak Reverse Current	I_{RM}	V_{RM} = V_{RRM} T_j = 25°C per diode leg	20	μA
Reverse Recovery Time	t_{rr}	I_{FM} = 3A -di/dt = 50A/μS T_j = 25°C	30	ns
Thermal Resistance	$R_{th(j-a)}$	Junction to Ambient, PCB mounted*	80	°C/W
	$R_{th(j-c)}$	Junction to Case	5	

*P.C. Board Print Land = 20 x 20 mm
◆For spare parts only

FIG.1-FORWARD VOLTAGE VS. FORWARD CURRENT

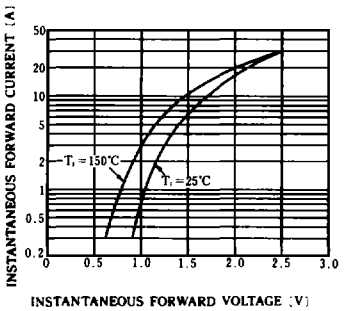


FIG.2-AVERAGE FORWARD POWER DISSIPATION

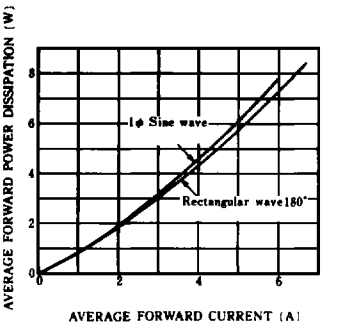


FIG.3-AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

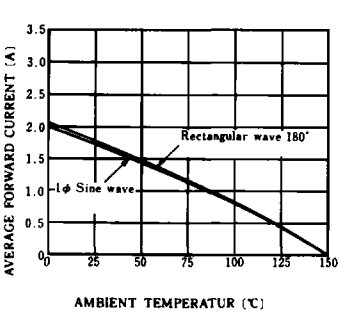


FIG.4-AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

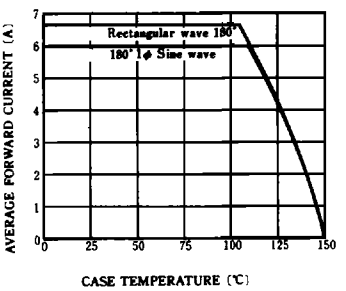
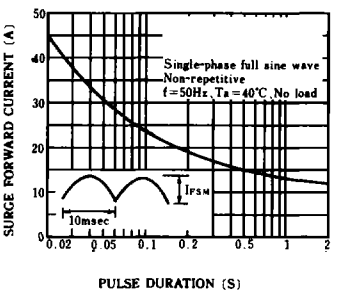


FIG.5-SURGE CURRENT RATINGS



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