

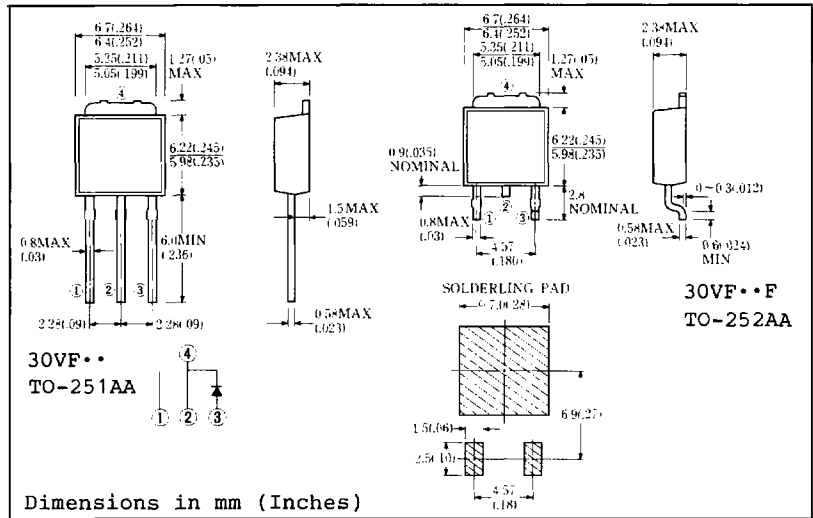
FAST RECOVERY DIODE

3.3A/300~400V/trr : 30nsec

30VF30 30VF40
30VF30F 30VF40F

FEATURES

- TO-251AA Case
- TO-252AA Case, Surface Mount Device
- Ultra - Fast Recovery
- Low Forward Voltage Drop
- Low Power Loss
- 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	◆ 30VF30	30VF40	Unit	
	Symbol	◆ 30VF30F	30VF40F		
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	180° rectangular wave conduction $T_C = 97^\circ\text{C}$		3.3	A
		180° sinusoidal wave conduction $T_C = 104^\circ\text{C}$		3.0	
RMS Forward Current	$I_{F(RMS)}$			4.7	A
Peak One-cycle Forward Surge Current	I_{FSM}	50Hz half sine wave, non-repetitive		30	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}	$I_{FM} = 3.0$ $T_j = 25^\circ\text{C}$	1.51	V
Peak Reverse Current	I_{RM}	$V_{RM} = V_{RRM}$ $T_j = 25^\circ\text{C}$	20	μA
Reverse Recovery Time	t_{rr}	$I_{FM} = 3\text{A}$ $-di/dt = 50\text{A}/\mu\text{s}$ $T_j = 25^\circ\text{C}$	30	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	8	°C/W

◆ For spare parts only

FIG.1-FORWARD VOLTAGE VS. FORWARD CURRENT

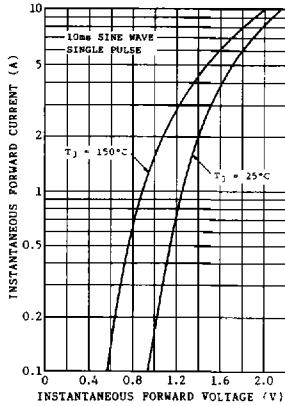


FIG.2-AVERAGE FORWARD POWER DISSIPATION

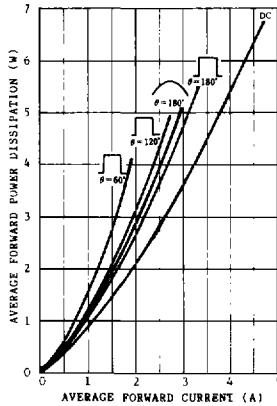


FIG.3-AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

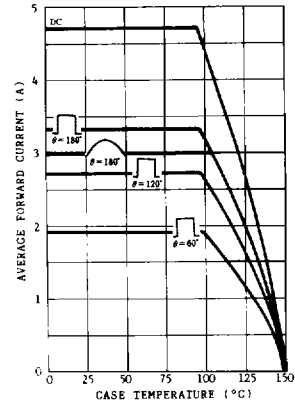


FIG.7-SURGE CURRENT RATINGS

