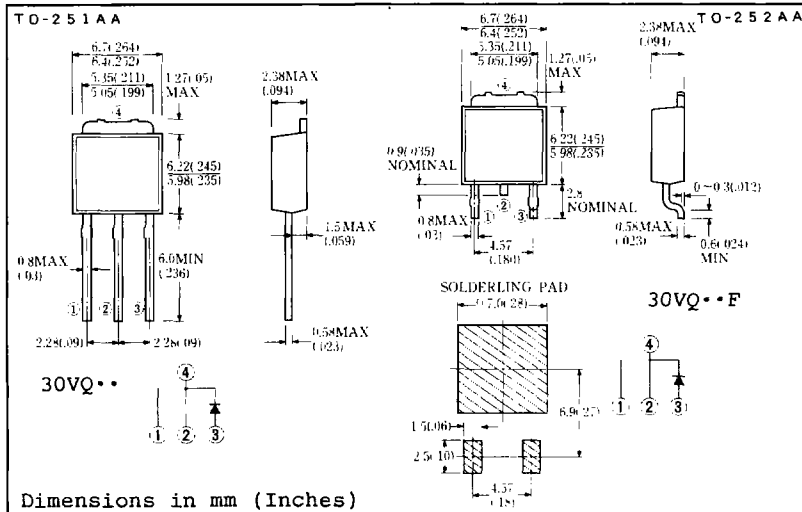


FEATURES

- TO-251AA Case
- TO-252AA Case
Surface Mount Device
- Low Forward Voltage Drop
- Low Power Loss
- High Surge Capability
- 30 Volts thru 100 Volts
Types Available
- Packaged in 16mm
Tape and Reel
(TO-252AA Case)



Dimensions in mm (Inches)

Approx. Net Weight: 0.35 Grams

0.3 Grams

MAXIMUM RATINGS

Voltage Rating	TYPE	30VQ09	30VQ10	Unit	
	Symbol	30VQ09F	30VQ10F		
Repetitive Peak Reverse Voltage	V_{RRM}	90	100	v	
Non-Repetitive Peak Reverse Voltage	V_{RSM}	---	---	v	
Electrical Rating	Symbol	Condition		Rating	Unit
Average Rectified Output Current	I_O	180° rectangular wave conduction $T_C = 103^\circ C$		3.3	A
		180° sinusoidal wave conduction $T_C = 107^\circ C$		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		40	A
Operating Junction Temperature Range	T_{jw}			-40 to 125	°C
Storage Temperature Range	T_{stg}			-40 to 125	°C

ELECTRICAL & THERMAL CHARACTERISTICS

Characteristics	Symbol	Test Condition		Max.	Unit
Peak Forward Voltage	V_{FM}	$I_{FM} = 3.0A$	$T_j = 25^\circ C$	0.91	v
Peak Reverse Current	I_{RM}	$V_{RM} = V_{RRM}$	$T_j = 25^\circ C$	1.0	mA
Thermal Resistance	$R_{th(j-c)}$	Junction to Case		6	°C/W

FIG.1-FORWARD VOLTAGE VS. FORWARD CURRENT

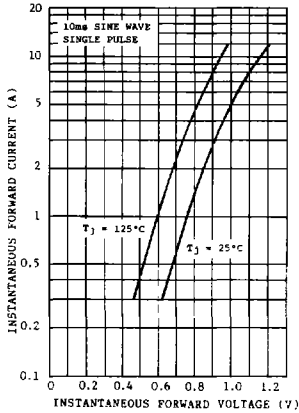


FIG.2-AVERAGE FORWARD POWER DISSIPATION

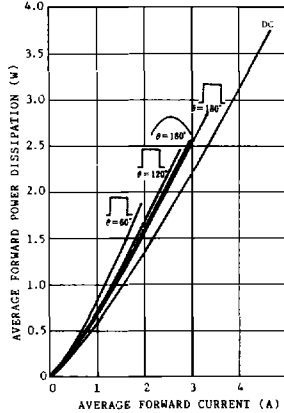


FIG.3-PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

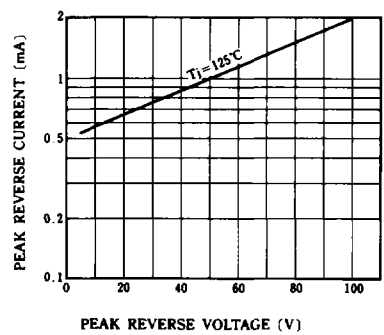


FIG.4-AVERAGE REVERSE POWER DISSIPATION

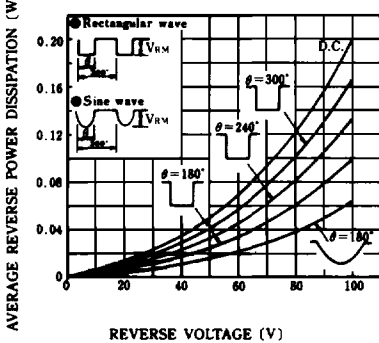


FIG.5-AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

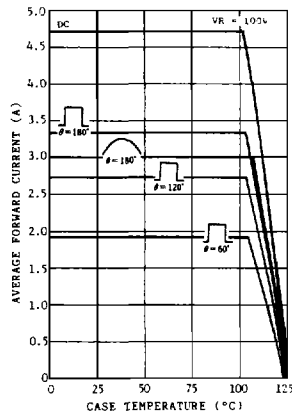


FIG.6-SURGE CURRENT RATINGS

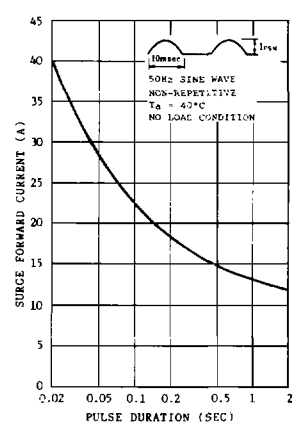


FIG.7-JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

