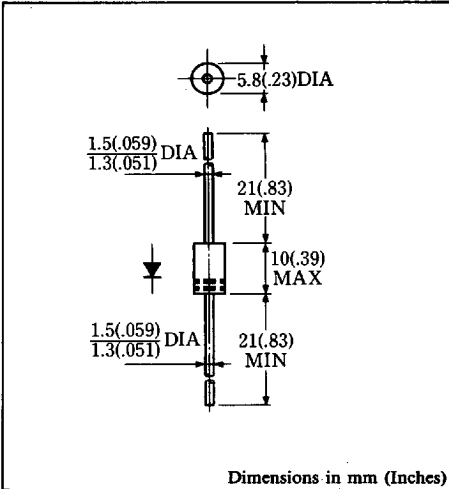


FEATURES

- Ultra-Fast Recovery
- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capability
- 100 Volts through 600 Volts Types Available



Approx. Net Weight: 1.23Grams

MAXIMUM RATINGS

Voltage Rating	Type Symbol	31DF6		Unit
Repetitive Peak Reverse Voltage	V_{RRM}	600		V
Electrical Rating	Symbol	Condition	Rating	Unit
Average Rectified Output Current	I_o	180° rectangular wave conduction * $T_l = 103^{\circ}C$	3.3	A
		180° sinusoidal wave conduction * $T_l = 109^{\circ}C$	3.0	
		Without FIN $T_a = 29^{\circ}C$	1.57	
RMS Forward Current	$I_{F(RMS)}$		4.7	A
Peak One-cycle Forward Surge Current	I_{FSM}	50Hz half sine wave 1 cycle, 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}	$I_{FM} = 3A$ $T_j = 25^{\circ}C$	1.7	V
Peak Reverse Current	I_{RM}	$V_{RM} = V_{RRM}$ $T_j = 25^{\circ}C$	20	μA
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10mA$ $T_a = 25^{\circ}C$	35	ns
Thermal Resistance	$R_{th(j-a)}$	Junction to Case	80	°C/W
	$R_{th(j-l)}$	Junction to Lead	8	

T_l : Lead Temperature

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FIG.1-FORWARD CURRENT VS. VOLTAGE

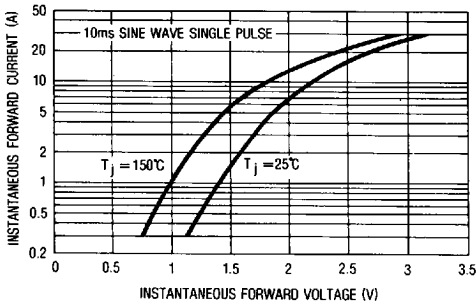


FIG.2-AVERAGE FORWARD POWER DISSIPATION

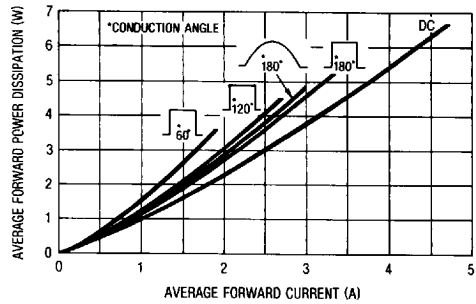


FIG.3-AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

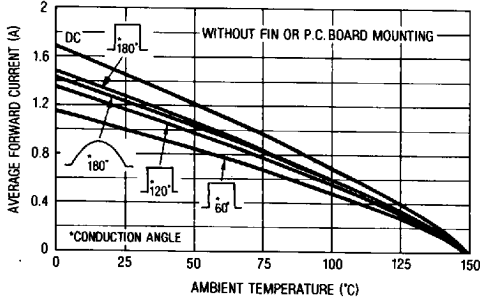


FIG.4-AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

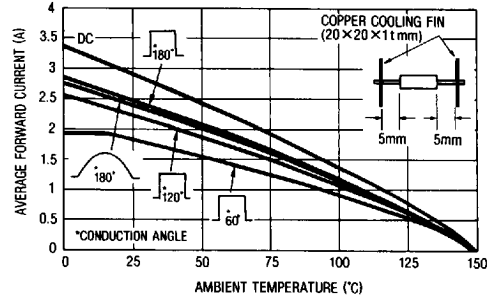


FIG.5-AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE

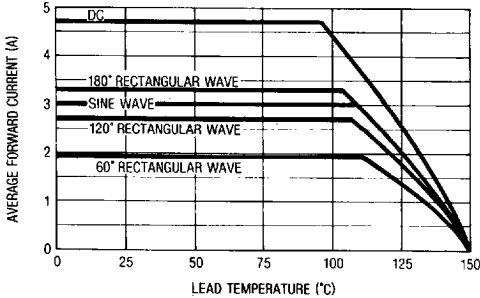
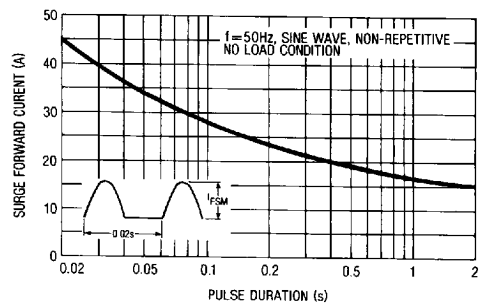


FIG.6-SURGE CURRENT RATINGS



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