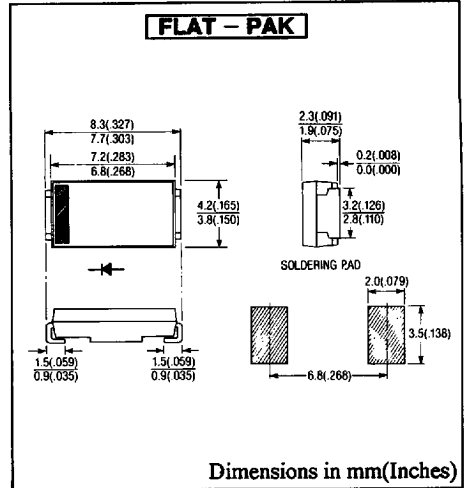


FEATURES

- Surface Mounting Device
- Extremely Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capability
- 20 Volts thru 100 Volts Types Available
- Packaged in 16mm Tape and Reel
- Not Rolling During Assembly



Approx. Net Weight : 0.16 Grams

MAXIMUM RATINGS

Voltage Rating	TYPE Symbol	◆ NSQ03A02L			Unit
Repetitive Peak Reverse Voltage	V_{RRM}	20			V
Non - Repetitive Peak Reverse Voltage	V_{RSM}	25			
Electrical Rating	Symbol	Condition	Rating	Unit	
Average Rectified Output Current (resistive load)	I_o	180° rectangular wave conduction $T_\ell^* = 98^\circ\text{C}$	3.3	A	
		180° sinusoidal wave conduction $T_\ell^* = 102^\circ\text{C}$	3.0		
Peak One - cycle Forward Surge Current	I_{FSM}	50Hz half sine wave, non - repetitive	120	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}	$I_{FM} = 3A, T_j = 25^\circ\text{C}$	0.45	V
Peak Reverse Current	I_{RM}	$V_{RM} = V_{RRM}, T_j = 25^\circ\text{C}$	3.0	mA
Thermal Resistance	$R_{th(j-\ell)}$	Junction to Lead	13	°C/W

* T_ℓ =Lead Temperature

◆ For spare parts only

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FIG. 1-FORWARD VOLTAGE VS. FORWARD CURRENT

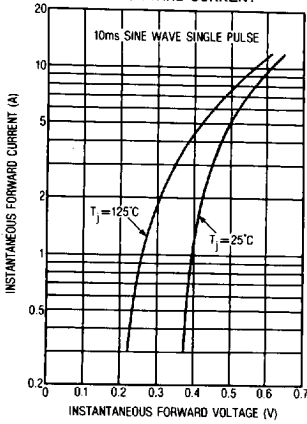


FIG. 2-AVERAGE FORWARD POWER DISSIPATION

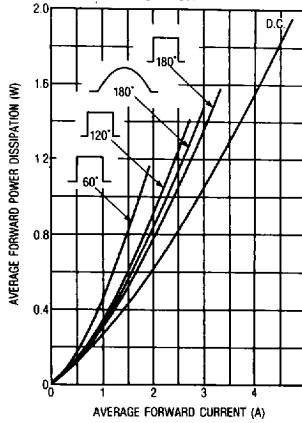


FIG. 3-PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

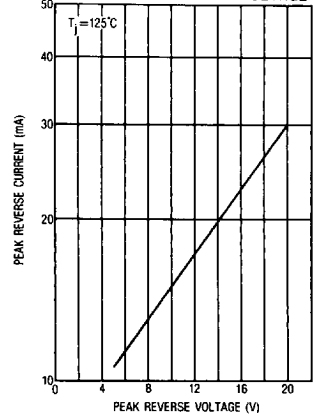


FIG. 4-AVERAGE REVERSE POWER DISSIPATION

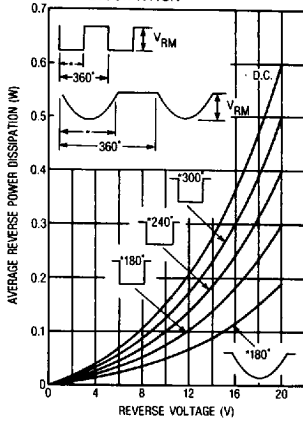


FIG. 5-AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

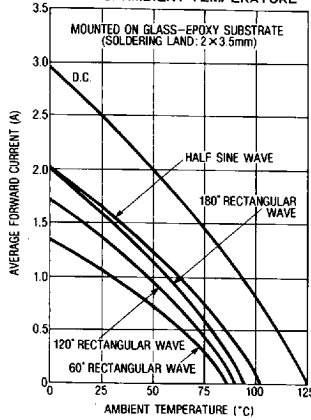


FIG. 6-AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

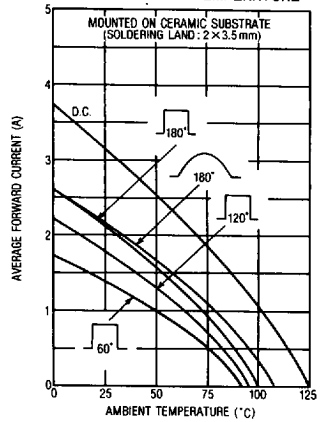


FIG. 7-AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

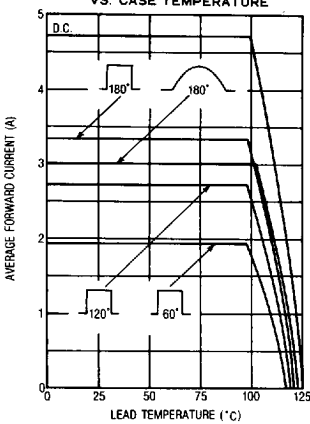


FIG. 8-SURGE CURRENT RATINGS

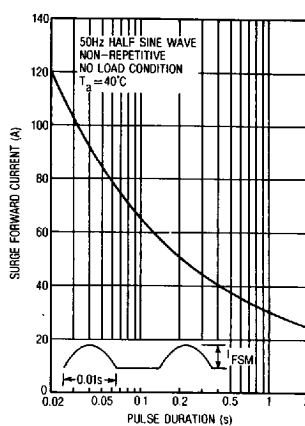
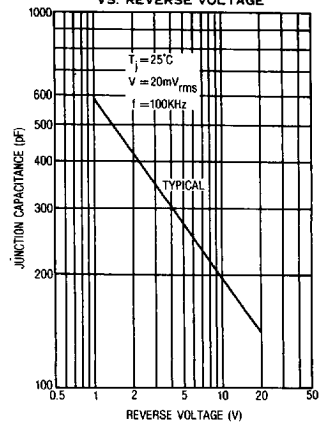


FIG. 9-JUNCTION CAPACITANCE VS. REVERSE VOLTAGE



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