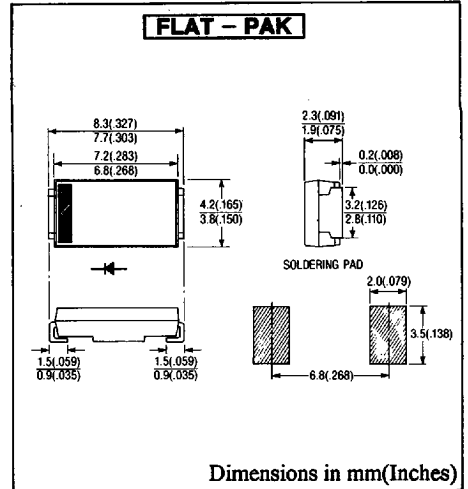


**FEATURES**

- Surface Mounting Device
- 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	NSH03A10		Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	100		V
Electrical Rating	Symbol	Condition	Rating	Unit
Average Rectified Output Current (resistive load)	$I_O$	180° rectangular wave conduction $T_{\ell} = 83^{\circ}\text{C}$	3.3	A
		180° sinusoidal wave conduction $T_{\ell} = 90^{\circ}\text{C}$	3.0	
Peak One-cycle Forward Surge Current	$I_{FSM}$	50Hz half sine wave, non-repetitive	60	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	$V_{FM}$	$I_{FM}=3A, T_j=25^{\circ}\text{C}$	0.85	V
Peak Reverse Current	$I_{RM}$	$V_{RM}=V_{RRM}, T_j=25^{\circ}\text{C}$	1.0	mA
Thermal Resistance	$R_{th(j-\ell)}$	Junction to Lead	13	°C/W

\* $T_{\ell}$  = Lead Temperature

FIG. 1-FORWARD VOLTAGE VS. FORWARD CURRENT

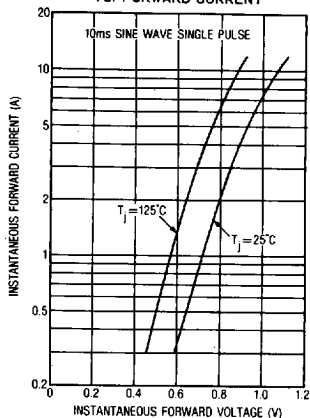


FIG. 2-AVERAGE FORWARD POWER DISSIPATION

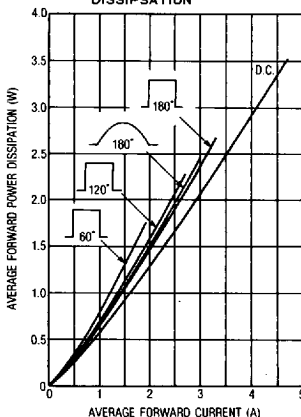


FIG. 3-PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

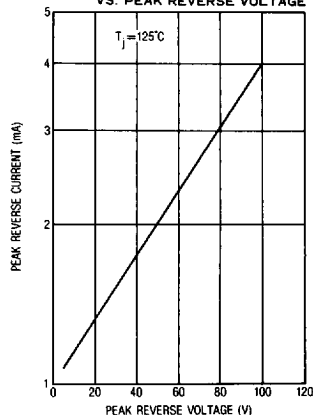


FIG. 4-AVERAGE REVERSE POWER DISSIPATION

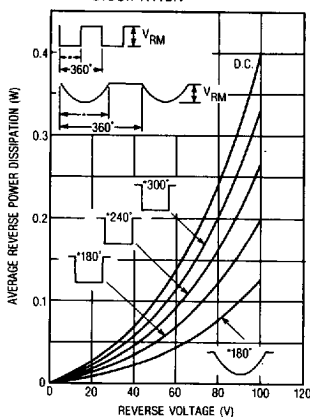


FIG. 5-AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

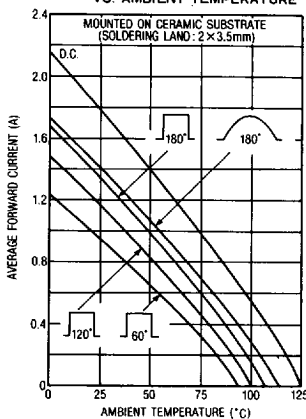


FIG. 6-AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE

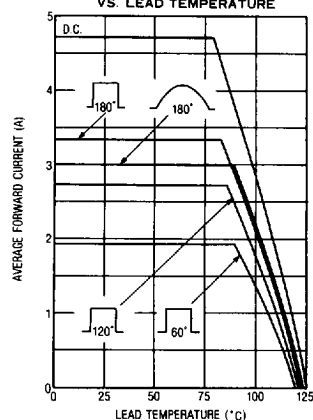


FIG. 7-SURGE CURRENT RATINGS

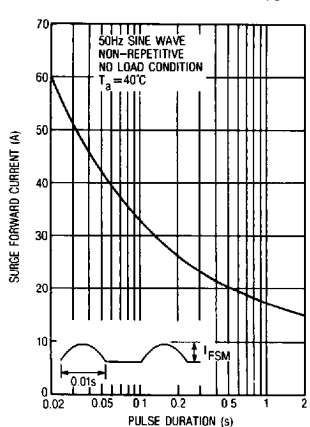
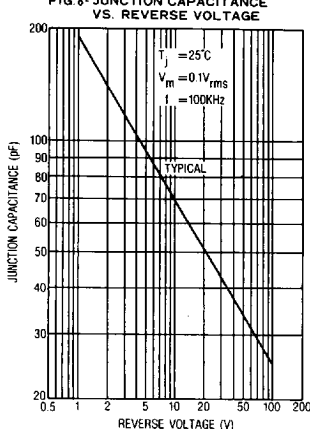


FIG. 8-JUNCTION CAPACITANCE VS. REVERSE VOLTAGE



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