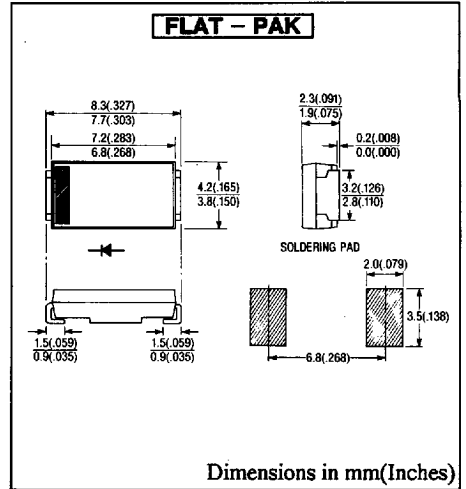


FEATURES

- Surface Mounting Device
- High Surge Capability
- Low Forward Voltage Drop
- Low Reverse Leakage Current
- Packaged in 16mm Tape and Reel
- Not Rolling During Assembly



Approx. Net Weight : 0.16 Grams

MAXIMUM RATINGS

Voltage Rating	TYPE Symbol	NSD03A10	NSD03A20	NSD03A40	Unit
Rapetitive Peak Reverse Voltage	V_{RRM}	100	200	400	V
Electrical Rating	Symbol	Condition		Rating	Unit
Average Rectified Output Current (resistive load)	I_O	180° sinusoidal wave conduction $T_\ell^* = 108^\circ\text{C}$		3.0	A
Peak One-cycle Forward Surge Current	I_{FSM}	50Hz half sine wave, non-repectitive		80	A
Operating Frequeny	f			1000	Hz
Operating Junction Temperature Range	T_{jw}			- 40 to 150	°C
Storage Temperatue Range	T_{stg}			- 40 to 150	°C

ELECTRICAL & THERMAL CHARACTERISTICS

Characteristics	Symbol	Test Condition	Max.	Unit
Peak Forward Voltage	V_{FM}	$I_{FM} = 3A, T_j = 25^\circ\text{C}$	1.0	V
Peak Reverse Current	I_{RM}	$V_{RM} = V_{RRM}, T_j = 25^\circ\text{C}$	50	μA
Thermal Resistance	$R_{th(j-\ell)}$	Junction to Lead	13	°C/W

* T_ℓ =Lead Temperature

FIG. 1- FORWARD VOLTAGE VS. FORWARD CURRENT

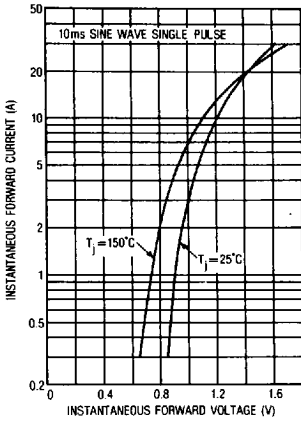


FIG. 2- AVERAGE FORWARD POWER VS. AVERAGE FORWARD CURRENT DISSIPATION

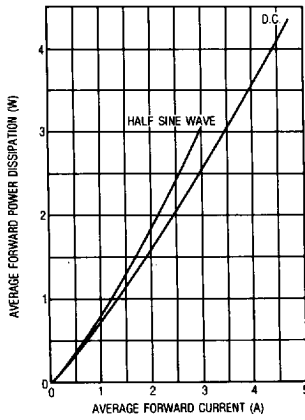


FIG. 3- AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

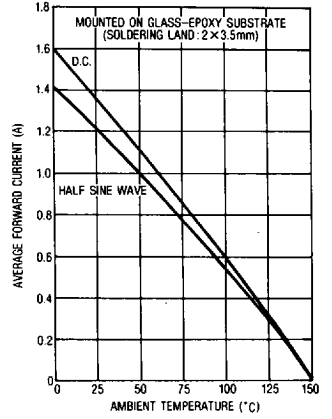


FIG. 4- AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

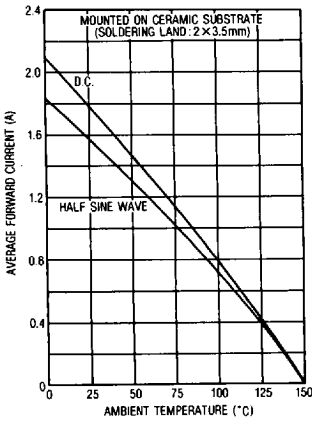


FIG. 5- AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE

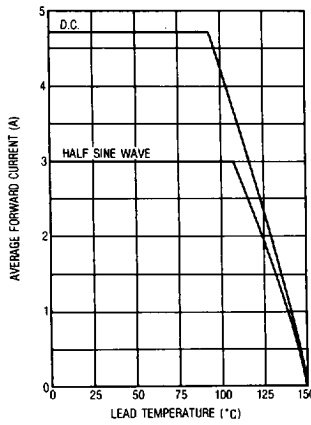
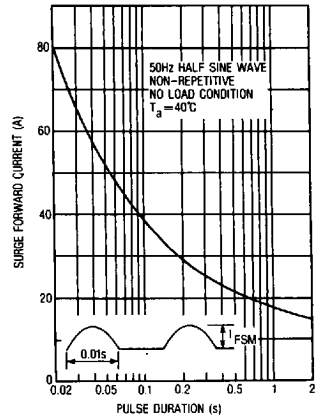


FIG. 6- SURGE CURRENT RATINGS



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