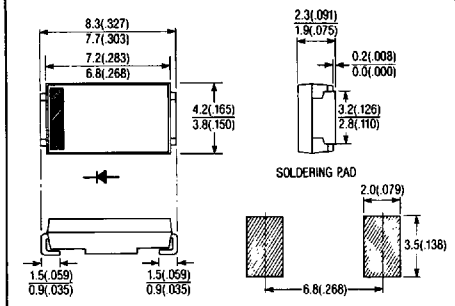
SCHOTTKY BARRIER DIODE 3.3A/20V NSQ03A02L

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 Real
- Not Rolling Durintg Assembly

FLAT – PAK



Dimensions in mm(Inches)

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 (resisitive load)	I_O	180° rectangular wave conduction T_ℓ *=98℃	3.3	A
		180° sinusoidal wave conduction T_ℓ *=102℃	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	℃
Storage Temperatue Range	T_{stg}		− 40 to 125	℃

ELECTRICAL & THERMAL CHARACTERISTICS

Characteristics	Symbol	Test Condition	Max.	Unit
Peak Forward Voltage	V_{FM}	I_{FM}=3A, T_j=25℃	0.45	V
Peak Reverse Current	I_{RM}	V_{RM}=V_{RRM}, T_j=25℃	3.0	mA
Thermal Resisitance	$R_{th(j-\ell)}$	Junction to Lead	13	℃/W

*T_ℓ =Lead Temperature

◆For spare parts only

FIG.1-FORWARD VOLTAGE VS. FORWARD CURRENT

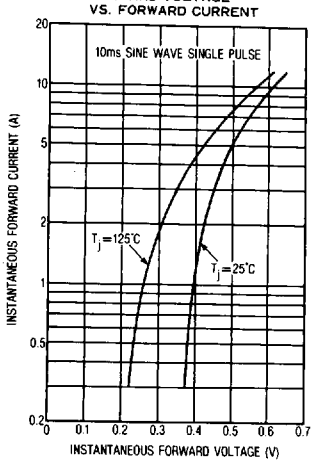


FIG.2-AVERAGE FORWARD POWER DISSIPSATION

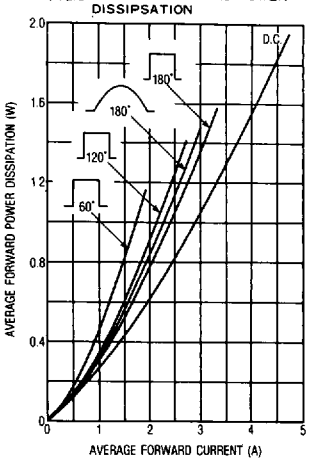


FIG.3-PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

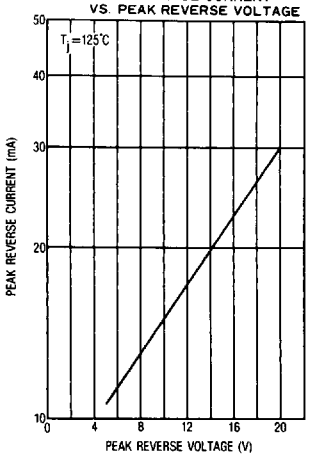


FIG.4-AVERAGE REVERSE POWER DISSIPATION

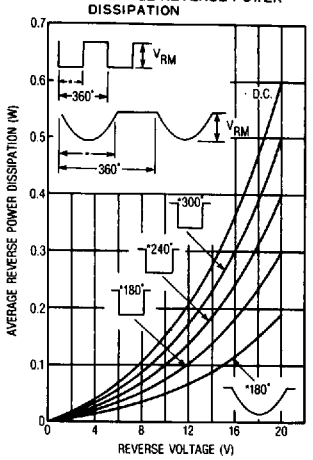


FIG.5-AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

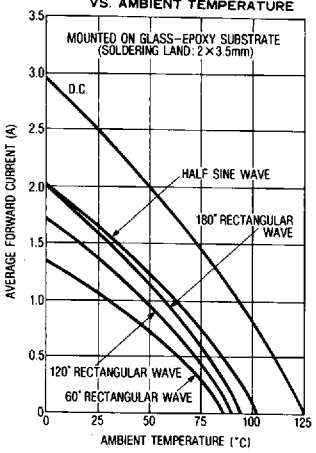


FIG.6-AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

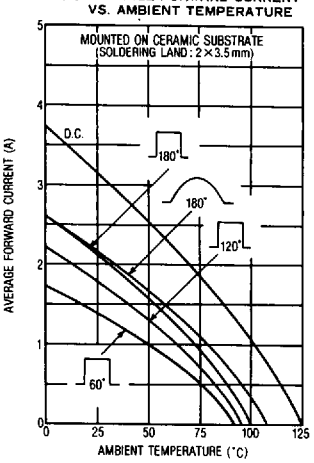


FIG.7-AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

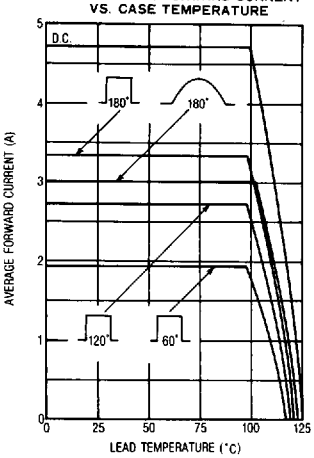


FIG.8-SURGE CURRENT RATINGS

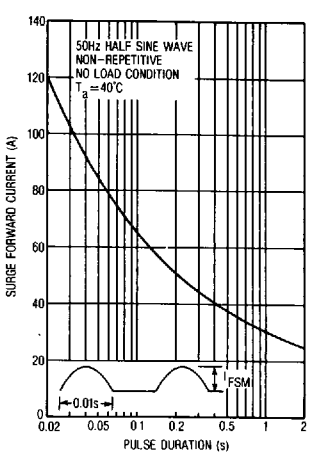
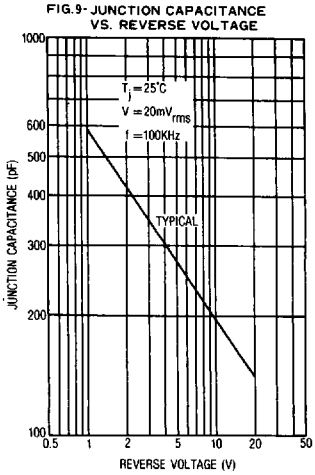


FIG.9-JUNCTION CAPACITANCE VS. REVERSE VOLTAGE



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