NS8AT - NS8MT

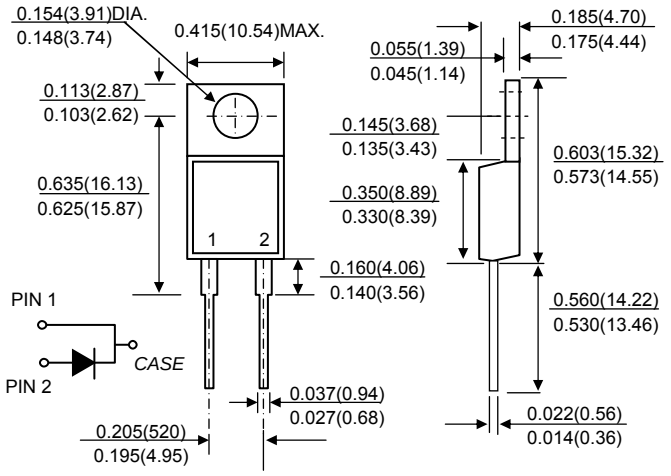
Glass Passivated General Purpose

PRV : 50 - 1000 Volts
Io : 8.0 Ampere

FEATURES :
* High current capability
* High surge current capability
* High reliability
* Low reverse current
* Low forward voltage drop
* Glass passivated chip junction
* Pb / RoHS Free

MECHANICAL DATA :
* Case : Epoxy, Molded
* Lead Temperature for Soldering Purposes: 260°C Max. for 10 Seconds
* Polarity: As marked
* Mounting Position: Any
* Weight : 2.24 grams (Approximately)

TO-220AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

RATING	SYMBOL	NS8 AT	NS8 BT	NS8 DT	NS8 GT	NS8 JT	NS8 KT	NS8 MT	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum Working Reverse Voltage	V_{RWM}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current, Tc = 100°C	$I_{F(AV)}$	8.0							A
Maximum Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125							A
Maximum Instantaneous Forward Voltage at I_F = 8 A	V_F	1.1							V
Maximum Reverse Current at Tc = 25 °C	I_R	10							µA
Rated DC Blocking Voltage Tc = 100 °C	$I_{R(H)}$	100							µA
Maximum Thermal Resistance, Junction to Case	$R_{\Theta JC}$	3.0							°C/W
Junction Temperature Range	T_J	- 55 to + 150							°C
Storage Temperature Range	T_{STG}	- 55 to + 150							°C

RATING AND CHARACTERISTIC CURVES (NS8AT ~ NS8MT)

FIG.1 - FORWARD CURRENT DERATING CURRENT

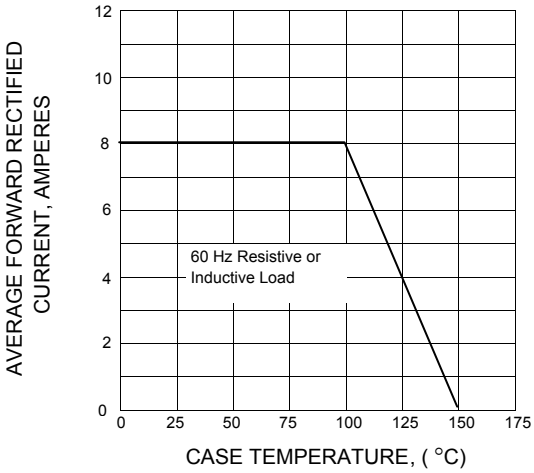


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

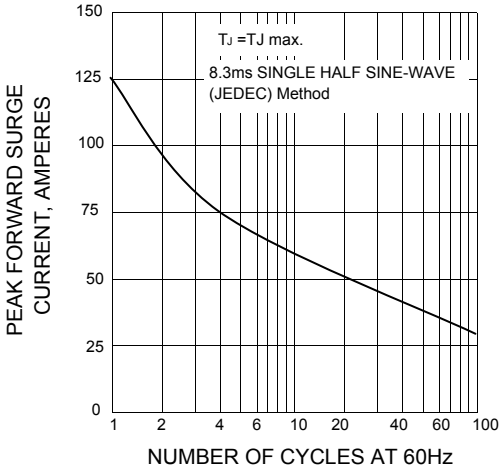


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

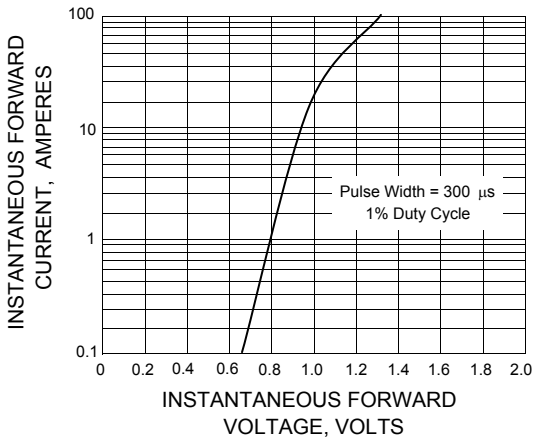


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS