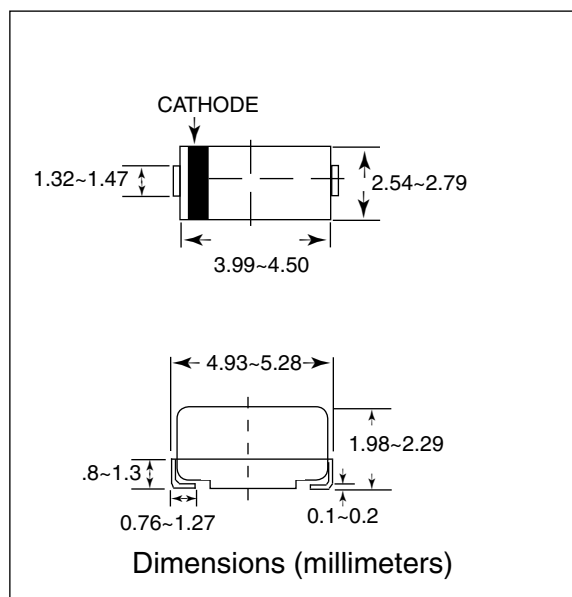


FEATURES

- VOLTAGE: 50 TO 1000 VOLTS, CURRENT; 1.0 AMPERE
- CORRESPONDS TO 1N4001 THRU 1N4007 IN SURFACE MOUNT PACKAGE
- FLAT PACK - LOW PROFILE, FOR SURFACE MOUNT APPLICATIONS
- GLASS PASSIVATED CHIP CONSTRUCTION
- HIGH TEMPERATURE SOLDERING (250°C/10 SECONDS)
- EASY PICK AND PLACE



MECHANICAL DATA:

SIZE: SMA/DO-214AC

CASE: Molded epoxy

TERMINALS: Solder plated Copper alloy

POLARITY: Indicated by cathode band

STANDARD PACKAGING: 12mm tape (EIA-RS-481)

WEIGHT: 0.064 gram

PART NUMBERING SYSTEM

NRD 4004 TR -5K E

Series Voltage designator (See table below) Reel qty: (3K & 5K) Denotes Pb-free (100% Sn)

MAXIMUM RATINGS (At T_A=25°C unless otherwise noted)

Ratings	Symbol	NRD4001	NRD4002	NRD4003	NRD4004	NRD4005	NRD4007	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	1000	Volts
Maximum Average Forward Rectified Current T _A =75°C	I _o	1.0						Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30						Amps
Maximum Thermal Resistance	(Note 2) R _{qJL}	30						°C/W
Typical Junction Capacitance (Note 1)	C _J	15						pF
Operating and Storage Temperature Range	T _J , T _{STG}	-60 to +150						°C
Maximum Reverse Recovery Time (Note 3)	TRR	2.5						μS

ELECTRICAL CHARACTERISTICS (At T_A=25°C unless otherwise noted)

Characteristics	Symbol	NRD4001	NRD4002	NRD4003	NRD4004	NRD4005	NRD4006	NRD4007	UNITS
Maximum Forward Voltage at 1.0A DC	V _F	1.1							Volts
Maximum Full Load Reverse Current Full Cycle Average @T _A =75°C	I _R	30							μAmps
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _A =25°C		5.0							μAmps
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _A =125°C		50							μAmps

- NOTES:
1. Measured at 1.0 MHz and applied average voltage of 4.0VDC.
 2. Thermal resistance junction to terminal, 5mm² (0.013 mm Thick) copper land patterns.
 3. Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, TRR=0.25A

RATING AND CHARACTERISTIC CURVES (NRD4001 THRU NRD4007)

FIG. 1 - FORWARD CURRENT DERATING CURVE

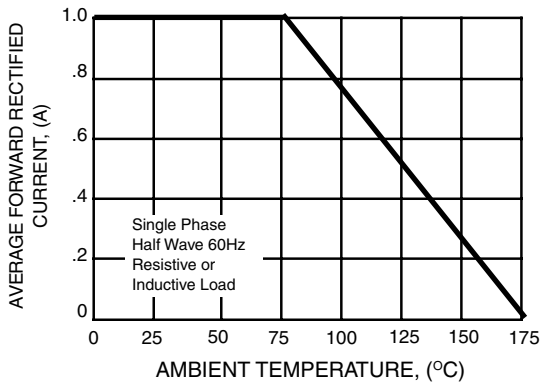


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

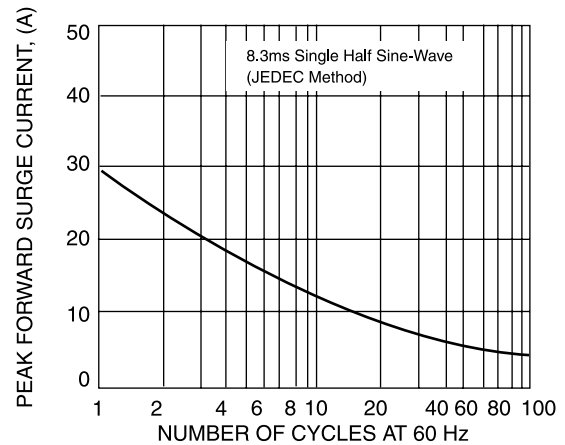


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

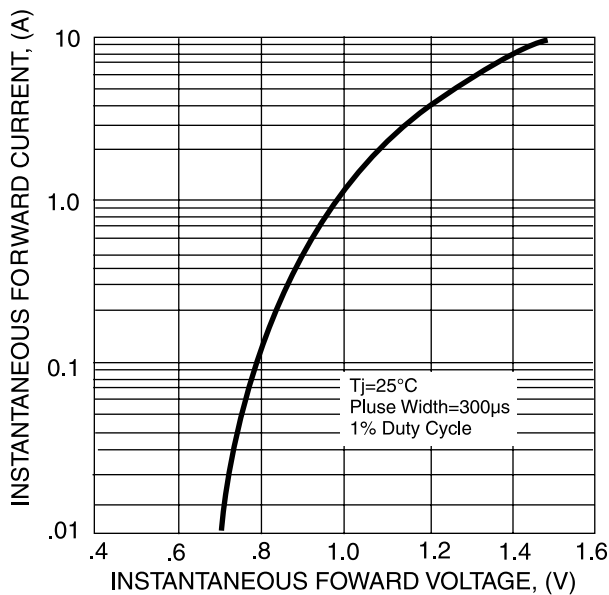


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

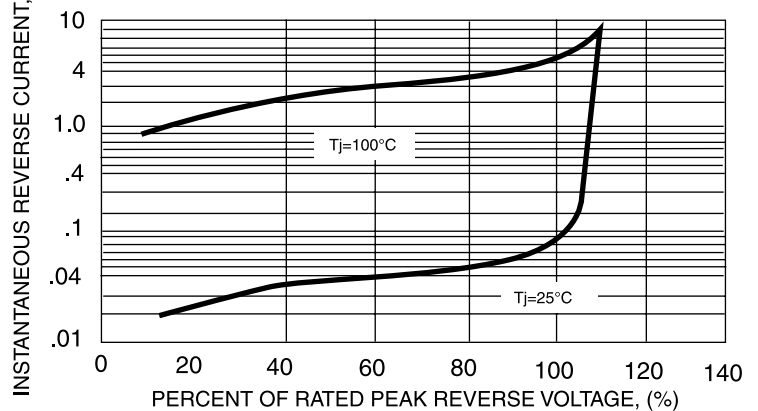


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

