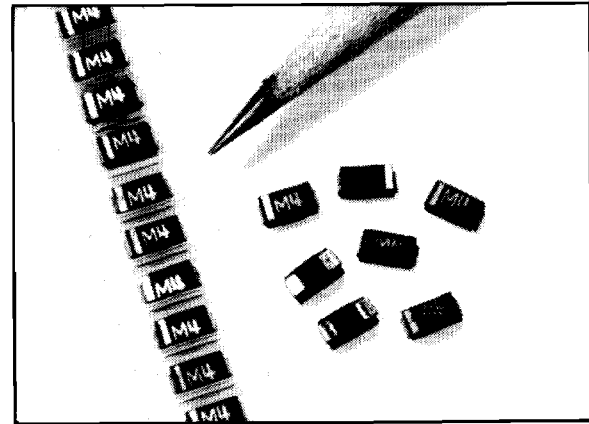
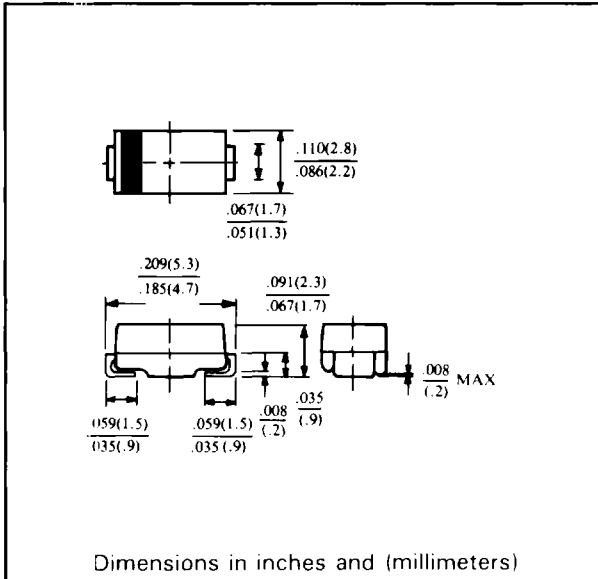


FEATURES

- VOLTAGE: 50 TO 1000 VOLTS, CURRENT; 1.0 AMPERE
- FLAT PACK - LOW PROFILE, FOR SURFACE MOUNT APPLICATIONS
- GLASS PASSIVATED CHIP CONSTRUCTION
- HIGH TEMPERATURE SOLDERING GUARANTEE (260°C/10 SECONDS)
- EASY PICK AND PLACE



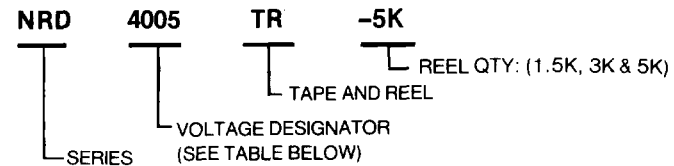
SURFACE MOUNT



MECHANICAL DATA:

CASE: Molded epoxy over glass passivated junction
 TERMINALS: Tin plated
 POLARITY: Indicated by cathode band
 STANDARD PACKAGING: 12mm tape
 WEIGHT: 0.057 gram

PART NUMBERING SYSTEM



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

RATINGS	SYMBOL	NRD4001	NRD4002	NRD4003	NRD4004	NRD4005	NRD4006	NRD4007	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current TA = 75°C	Io	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) RθJL (Note 3) RθJA	20 50							°C/W
Typical Junction Capacitance (Note 1)	CJ	15							pF
Operating and Storage Temperature Range	TJ, TSTG	-65 to +175							°C

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

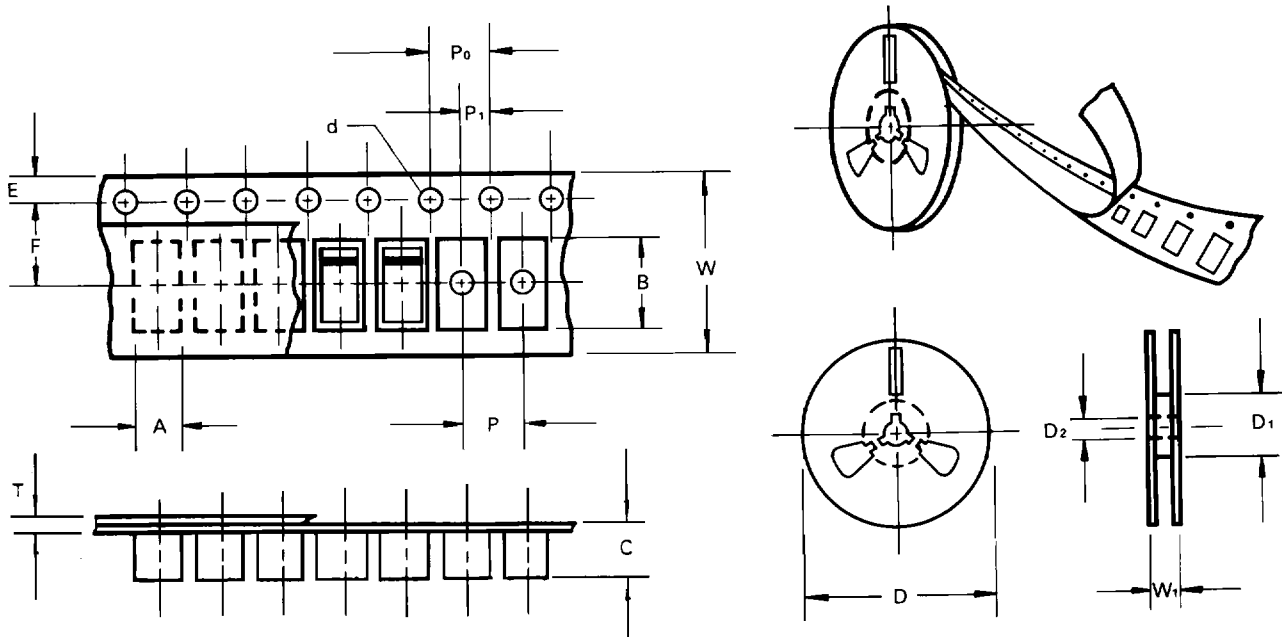
CHARACTERISTICS	SYMBOL	NRD4001	NRD4002	NRD4003	NRD4004	NRD4005	NRD4006	NRD4007	UNITS
Maximum Forward Voltage at 1.0A DC	Vf	1.1							Volts
Maximum Full Load Reverse Current, Full cycle Average at TA = 75°C	Ir	30							μAmps
Maximum DC Reverse Current at Rated DC Blocking Voltage @TA = 25°C		5.0							μAmps
@TA = 125°C		50							μAmps

- NOTES: 1. Measured at 1.0 MHz and applied average voltage of 4.0VDC
 2. Thermal resistance junction to terminal 6.0mm² copper pads to each terminal.
 3. Thermal resistance junction to ambient, 6.0mm² copper pads to each terminal.



REEL TAPING SPECIFICATIONS

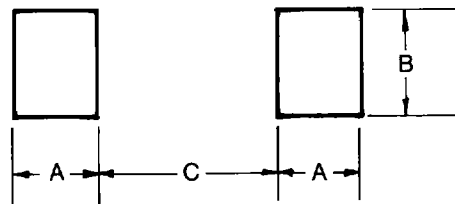
SURFACE MOUNT



REEL QUANTITIES

REEL SIZE	QTY/REEL
7 inch (178mm)	1500 pcs.
13 inch (330 mm)	3000, 5000 pcs.

RECOMMENDED LAND PATTERN



DIMENSIONS	(mm)
A	1.2 min.
B	1.5 min
C	2.5 max.

ITEM	SYMBOL	SPECIFICATIONS (mm)	SPECIFICATIONS (inch)
Carrier width	A	3.2 max.	.126 max.
Carrier length	B	7.8 max.	.307 max.
Carrier depth	C	4.5 max.	.177 max.
Sprocket hole	d	1.5 ± 0.1	.059 ± .004
Reel outside diameter	D	178 ± 2.0	7.00 ± .079
Reel inner diameter	D ₁	50 min.	1.969 min.
Feed hole diameter	D ₂	13.0 ± 0.5	.512 ± .020
Sprocket hole position	E	1.75 ± 0.1	.069 ± .004
Punch hole position	F	5.5 ± 0.1	.217 ± .004
Punch hole pitch	P	4.0 ± 0.1	.157 ± .004
Sprocket hole pitch	P ₀	4.0 ± 0.1	.157 ± .004
Embossment center	P ₁	2.0 ± 0.05	.079 ± .002
Overall tape thickness	T	1.1 max.	.043 max.
Tape width	W	12.0 ± 0.3	.472 ± .012
Reel width	W ₁	18.4 max.	.724 max.

NOTE: Devices are packed in accordance with EIA standard RS 481-A and specifications given above.



RATING AND CHARACTERISTIC CURVES (NRD4001 THRU NRD4007)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

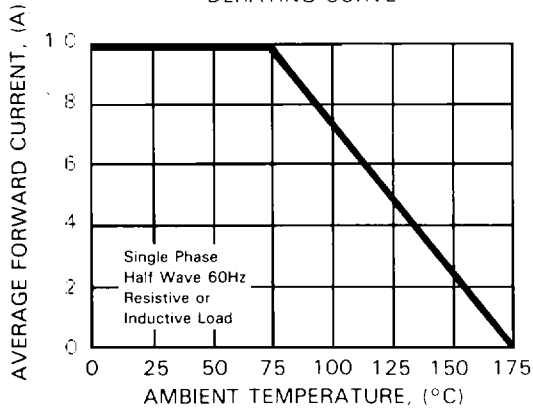


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

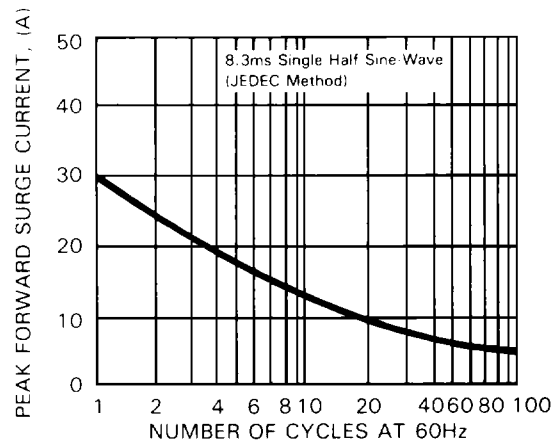


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

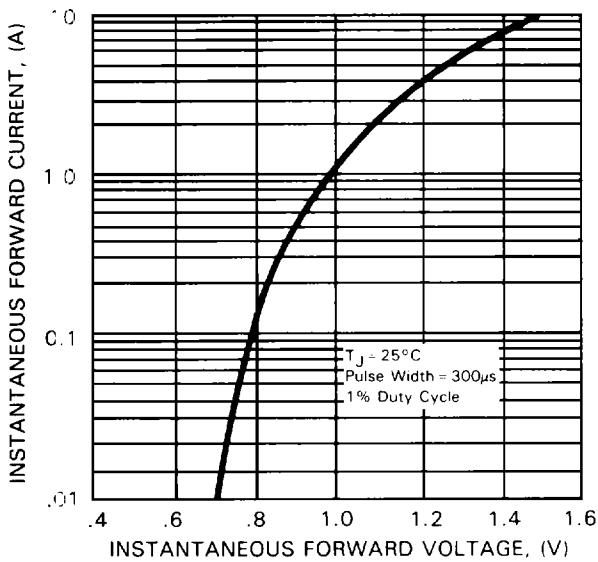


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

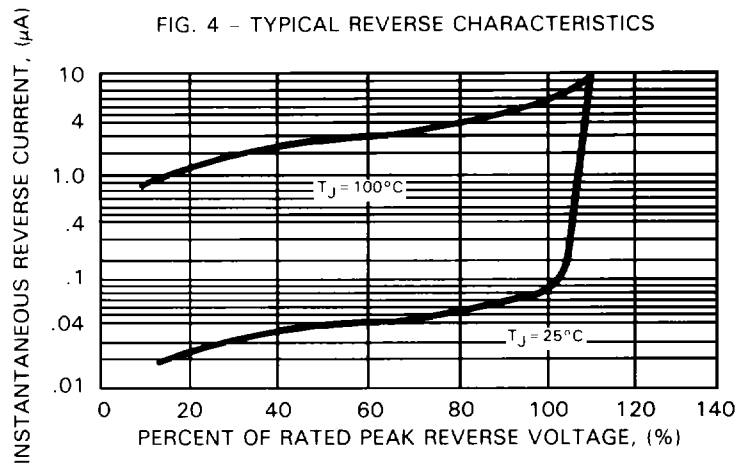
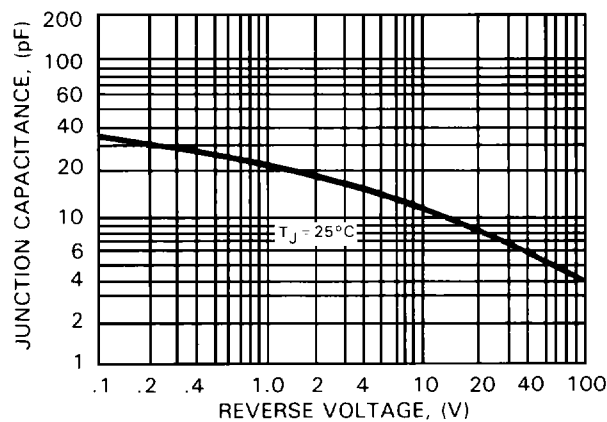


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



SURFACE MOUNT

