Surface Mount Gas Discharge Tube

NGTM Series

FEATURES

- ULTRA HIGH CURRENT (UP TO 20,000A @ 8/20μS)
- CASE SIZE 2332 (6.0MM X 8.3MM X 8.3MM)
- LOW CAPACITANCE AND INSERTION LOSS
- COMPATIBLE WITH REFLOW SOLDERING (+260°C)
- RoHS COMPLIANT

RoHS Compliant
includes all homogeneous materials*

*See Part Number System for Details

SPECIFICATIONS

Type	Breakdown Voltage [1,2] (100V/S)	Breakdown Voltage Tolerance (V)	Impulse Spark-over Voltage [1,2] (1KV/μs)	Impulse Discharge Current [3] (8/20μs)	Insulation Resistance	Capacitance (1MHz, 0.5VDC)	Arc Voltage 1A	Application	Circuit
NGTM2332M091TR20F	90V	72 ~ 108	≤ 600V	20,000A	≥1GΩ @ 50V	≤1.5pF	~ 8V	DC Power	1 2
NGTM2332M351TR20F	350V	280 ~ 420	≤ 650V		≥1GΩ @ 100V		~ 15V	DC Power	1 2
NGTM2332M471TR20F	470V	376 ~ 564	≤ 850V				~ 15V	AC Power	1 2
NGTM2332M601TR20F	600V	480 ~ 720	≤ 950V				~ 15V	AC Power	1 2
NGTM2332M801TR20F	800V	640 ~ 960	≤ 1200V				~ 15V	AC Power	1 2
NGTM2332M152TR10F	1500V	1200 ~ 1800	≤ 2500V	10,000A			~ 15V	AC Power	1 2
NGTM2332M362TR05F	3600V	2800 ~ 4320	≤ 5000V	5,000A			~ 15V	AC Power	1 2

Contact NIC regarding availability of values not shown.

1. Parameters are based on ITU-T K.12
2. The V-T waveform of the DC Breakdown Voltage and Impulse Spark-over Voltage must lie between the shades areas (see graph below)
3. Total Impulse Discharge Current @ 8/20μs by IEC 6100-4-5, 10 shots

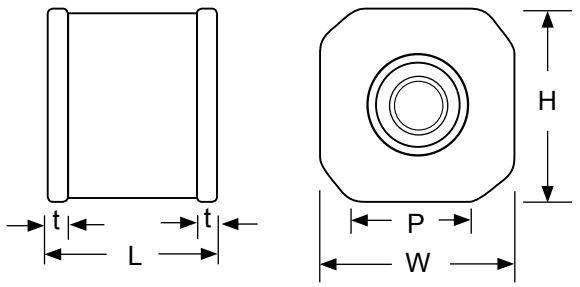
PART NUMBERING SYSTEM

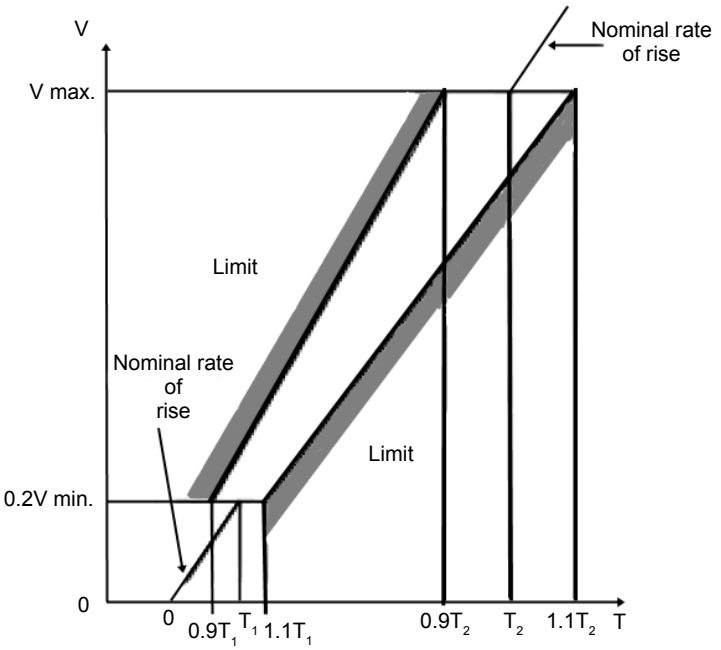
NGTM 2332 M 601 TR 20 F

- F — RoHS Compliant
- 20 — 20=20KA, 10=10KA, 05=5KA Impulse Discharge Current
- TR — TR = Tape & Reel
- 601 — Voltage Code: 421 = 420 Volts
- M — Tolerance Code (M = ±20%)
- 2332 — Case Size Code (see dimensions table)
- NGTM — Series

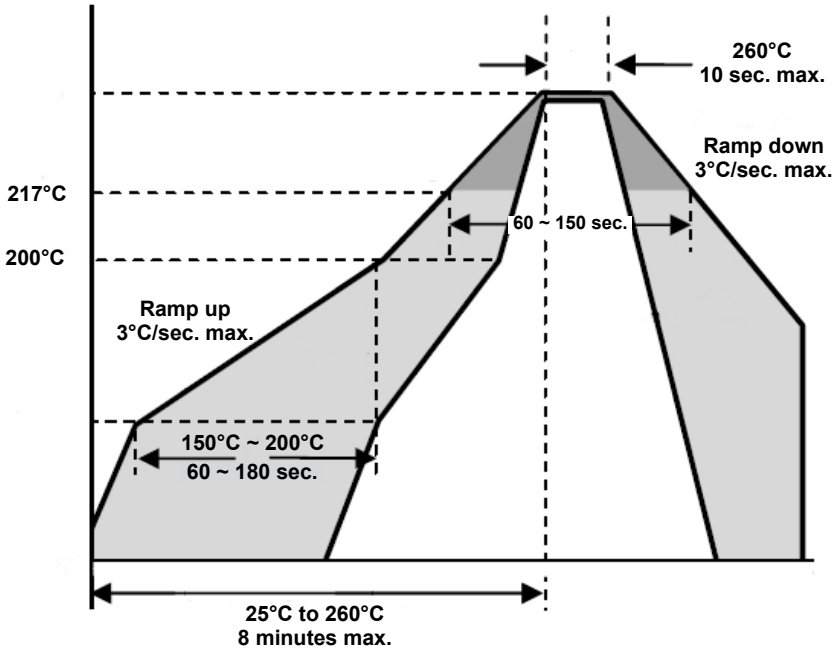
DIMENSIONS (mm)

L	W	H	P	t
6.0 ± 0.2	8.3 ± 0.2	8.3 ± 0.2	4.2 ± 0.1	0.5 ± 0.05



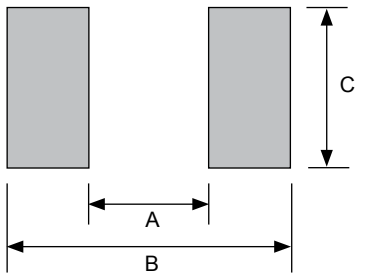


REFLOW SOLDERING PROFILE



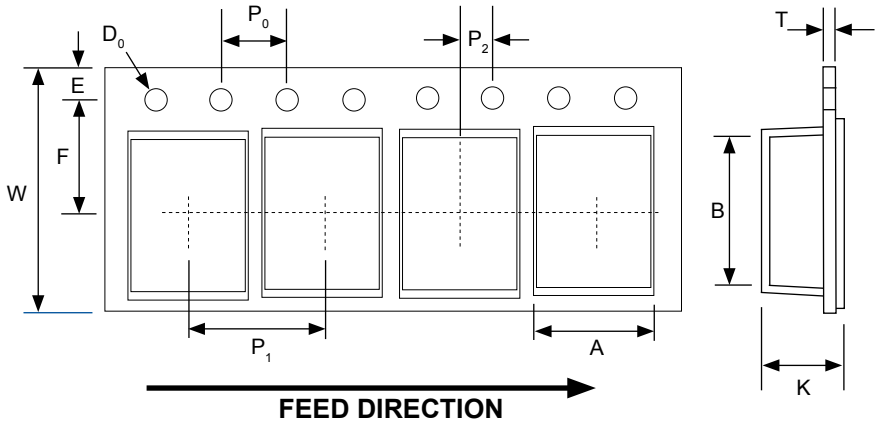
LAND PATTERN DIMENSIONS (mm)

Case Size	A	B	C
3223	4.5	7.95	8.0



EMBOSSED PLASTIC CARRIER DIMENSIONS (mm)

Case Size	A	B	D_0	E	F	P_0	P_1	P_2	T	K	W
2332	6.5 ± 0.2	8.4 ± 0.2	$1.50^{+0.1}/_{-0}$	1.75 ± 0.1	7.50 ± 0.1	4.0 ± 0.1	12.0 ± 0.1	2.0 ± 0.1	0.55 ± 0.05	8.6 ± 0.2	16.0 ± 0.4



REEL DIMENSIONS (mm) AND QUANTITY

Case Size	A	B	C	W	Qty
2332	330 ± 2.0	13.0 ± 0.15	100 ± 2.0	16.5 ± 0.5	500