

# Surface Mount Gas Discharge Tube

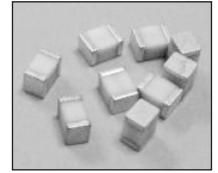
NGTC Series

## FEATURES

- FAST RESPONSE, HIGH CURRENT (2,000A @ 8/20 $\mu$ S)
- CASE SIZE 1812 (4.5MM X 3.2MM X 2.7MM)
- LOW CAPACITANCE AND INSERTION LOSS
- OPERATING TEMPERATURE RANGE -55°C ~ +105°C
- UL LISTED - ISOLATED LOOP CIRCUIT PROTECTORS-COMPONENTS
- COMPATIBLE WITH REFLOW SOLDERING (+260°C)
- RoHS COMPLIANT

**RoHS  
Compliant**  
includes all homogeneous materials\*

\*See Part Number System for Details



## SPECIFICATIONS

Type	Breakdown Voltage <sup>1,2</sup> (100V/S)	Breakdown Voltage Tolerance (V)	Impulse Spark-over Voltage <sup>1,2</sup> (1KV/ $\mu$ S)	Impulse Discharge Current <sup>3</sup> (8/20 $\mu$ S)	Insulation Resistance	Cap. (1MHz, 0.5VDC)	Arc Voltage 1A	Application	Circuit
NGTC1812N201TR2F	200V	140 ~ 260	$\leq$ 750V	2,000A	$\geq$ 1G $\Omega$ @ 100V	<1pF	~8V	RS485 RS232 RS422	1  2
NGTC1812N301TR2F	300V	210 ~ 390	$\leq$ 750V				~15V	DC12V AC24V	1  2
NGTC1812N401TR2F	400V	360 ~ 560	$\leq$ 950V				~15V	xDSL	1  2
NGTC1812N601TR2F	600V	420 ~ 780	$\leq$ 1200V				~15V	Ethernet	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 2,000A @ 8/20 $\mu$ s by IEC 61000-4-5, 10 shots.

## UL Listing:

NIC COMPONENTS CORP  
Isolated Loop Circuit Protectors - Component  
RE: QVGQ2.E467518



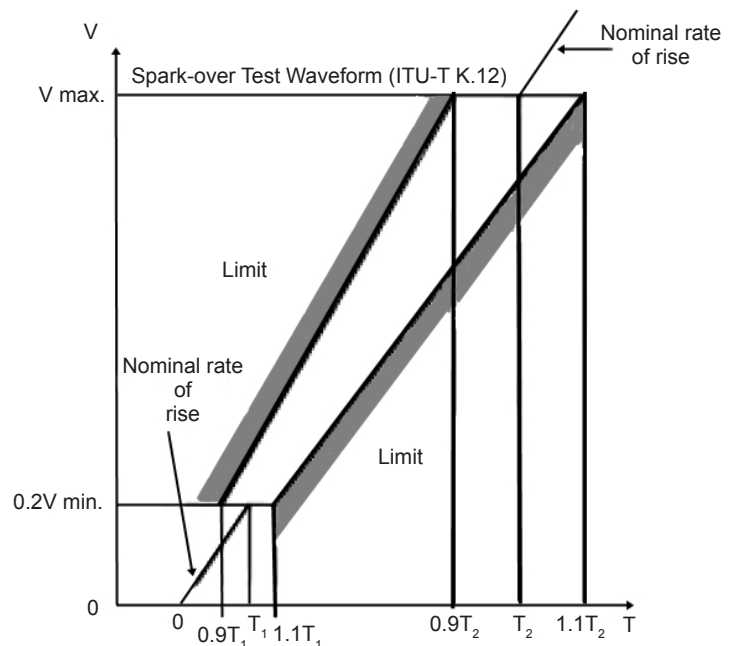
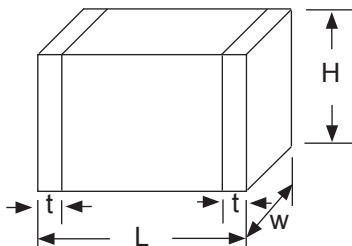
## PART NUMBERING SYSTEM

**NGTC 1812 N 401 TR 2 F**

- RoHS Compliant
- 2 = 2KA Impulse Discharge Current
- TR = Tape & Reel
- Voltage Code: 401 = 40 x 10<sup>1</sup> = 400 Volts
- Tolerance Code (N =  $\pm$ 30%, See specifications table)
- Case Size Code (see dimensions table)
- Series

## DIMENSIONS (mm)

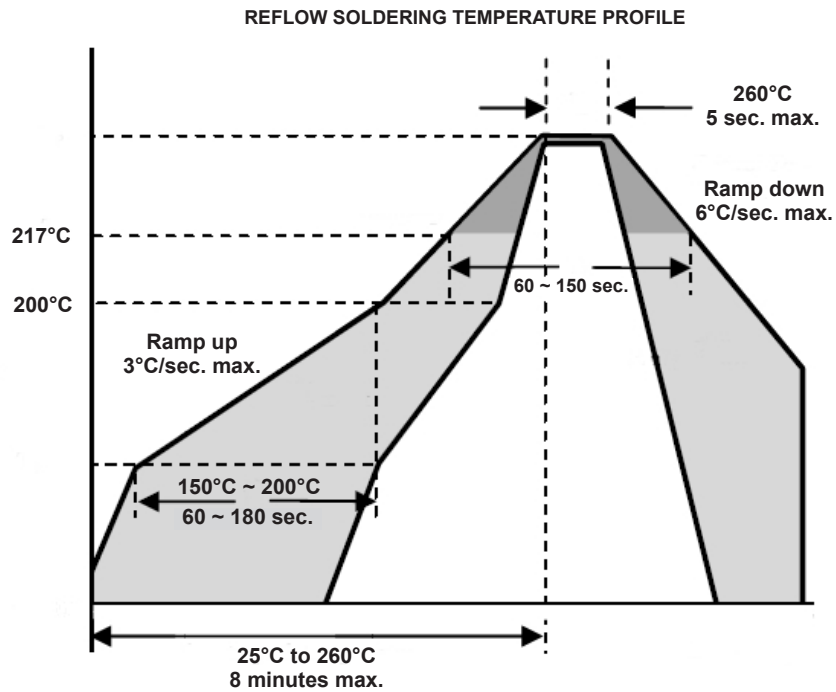
L	W	H	t
4.5 $\pm$ 0.3	3.2 $\pm$ 0.2	2.7 $\pm$ 0.2	0.5 $\pm$ 0.2



NIC COMPONENTS CORP.

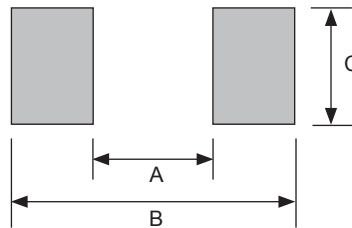
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SPECIFICATIONS ARE SUBJECT TO CHANGE



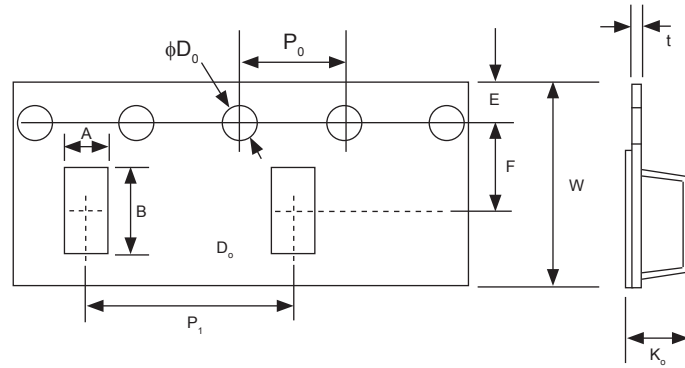
**LAND PATTERN DIMENSIONS (mm)**

Case Size	A	B	C
1812	3.5	5.5	3.5



## EMBOSED PLASTIC CARRIER DIMENSIONS (mm)

Case Size	A	B	$\phi D_0$	E	F	$P_0$	$P_1$	t	$K_0$	W
1812	3.70 ±0.20	4.70 ±0.20	1.50 ±0.10	1.75 ±0.10	5.50 ±0.10	4.00 ±0.10	8.00 ±0.10	0.4 ±0.20	3.10 ±0.20	12.0 ±0.20



## REEL DIMENSIONS (mm) AND QUANTITY

Case Size	D	D1	D2	W1	Qty
1812	$\phi 330$	$\phi 50$	13.0 ± 0.15	16.8 ± 2.0	2,500

