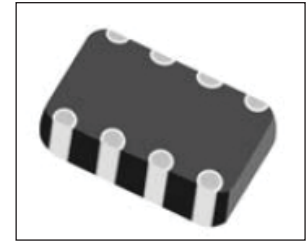


FEATURES

- MULTILAYER CONSTRUCTION
- TRANSIENT VOLTAGE (ESD, I/O, EFT AND BURST) PROTECTION
- 4-ELEMENTS TO 8-ELEMENTS IN SINGLE PACKAGE
- REDUCED PCB SPACE AND ASSEMBLY COST
- R-C TERMINATOR CIRCUITS
- CASE SIZE 0805 & 0825 (2.05mm x 1.25mm)
- FOR TRANSIENT VOLTAGE AND EMI PROTECTION
- FAST RESPONSE (LESS THAN 0.5nS)
- LOW CLAMPING VOLTAGES
- REFLOW SOLDERING COMPATIBLE



*1 - V_c , Maximum peak voltage across the varistor at 1 A, 8/20 μ s impulse current.

*2 - V_c , Maximum peak voltage across the varistor measured at 30ns after initiation of pulse on IEC61000-4-2 30A/8KV.

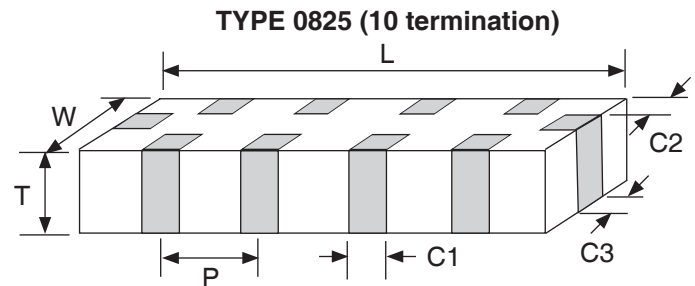
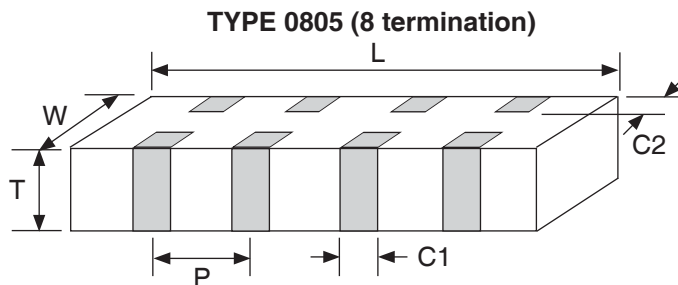
*3 - I_p , Maximum peak current applied at 8/20 μ s surge impulse current without varistor failure.

Please specify the capacitance tolerance code (N= \pm 30%, Y= $+100\%$ ~-50%).

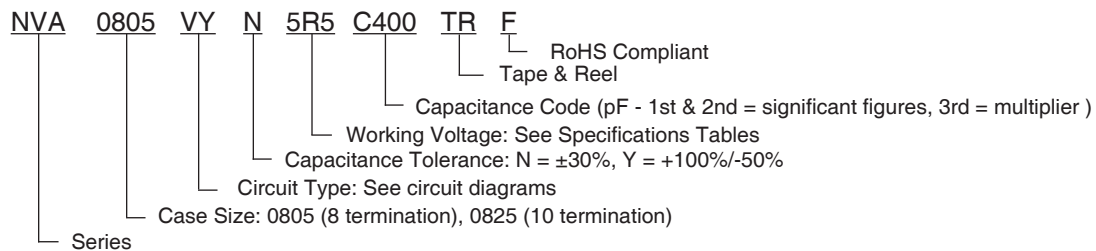
Inquiries for custom products are welcome, please contact local NIC sales personnel to review your requirements.

CASE SIZE DIMENSIONS (mm)

Type	L	W	T	C1	C2	C3	P
NVA0805	2.05 \pm 0.10	1.25 \pm 0.10	0.85 \pm 0.10	0.25 \pm 0.10	0.20 \pm 0.10	/	0.50 \pm 0.10
NVA0825	2.05 \pm 0.10	1.25 \pm 0.10	0.85 \pm 0.10	0.25 \pm 0.10	0.20 \pm 0.10	0.30 \pm 0.10	0.50 \pm 0.10



PART NUMBERING SYSTEM

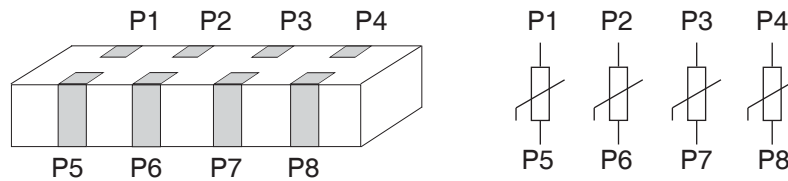


NVA0805VY 8 TERMINATION, ISOLATED CIRCUIT

Part Number	Max. Working Voltage <20mA		Varistor Voltage @ 1mA DC (Volts)	Max. Clamping Voltage		Rated Single Pulse Transient Peak Current 8/20µs (Amps. ₃)	Typical Capacitance @ 0.5Vrms, 1MHz (pF)
	VDC	VAC RMS		8/20µs (Volts. ₁)	ESD (Volts. ₂)		
NVA0805VY_5R5C400TRF	5.5	4	10 ~ 14	18	23	5	40
NVA0805VY_140C100TRF	14	10	16 ~ 22	30	39	2	10
NVA0805VY_140C400TRF	14	10	16 ~ 22	30	39	5	40
NVA0805VY_140C700TRF	14	10	16 ~ 22	30	39	10	70
NVA0805VY_180C100TRF	18	12.7	22 ~ 28	40	48	2	10
NVA0805VY_180C150TRF	18	12.7	22 ~ 28	40	48	2	15

"_" = Add Capacitance Tolerance: **N** = ±30%, **Y** = +100%/-50%

NVA0805VY 8 TERMINATION ISOLATED CIRCUIT

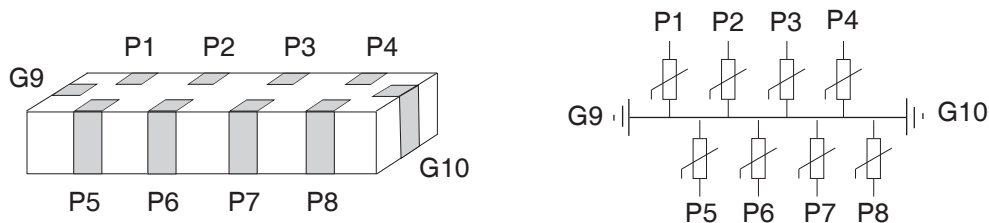


NVA0825VZ, 10 TERMINATION, BUSSED CIRCUIT

Part Number	Max. Working Voltage <20mA		Varistor Voltage @ 1mA DC (Volts)	Max. Clamping Voltage		Rated Single Pulse Transient Peak Current 8/20µs (Amps. ₃)	Typical Capacitance @ 0.5Vrms, 1MHz (pF)
	VDC	VAC RMS		8/20µs (Volts. ₁)	ESD (Volts. ₂)		
NVA0825VZ_5R5C200TRF	5.5	4	10 ~ 14	18	23	3	20
NVA0825VZ_140C100TRF	14	10	16 ~ 22	30	39	2	10
NVA0825VZ_180C100TRF	18	12.7	22 ~ 28	40	48	2	10
NVA0825VZ_180C150TRF	18	12.7	22 ~ 28	40	48	2	15

"_" = Add Capacitance Tolerance: **N** = ±30%, **Y** = +100%/-50%

NVA0825VZ 10 TERMINATION BUSSED CIRCUIT

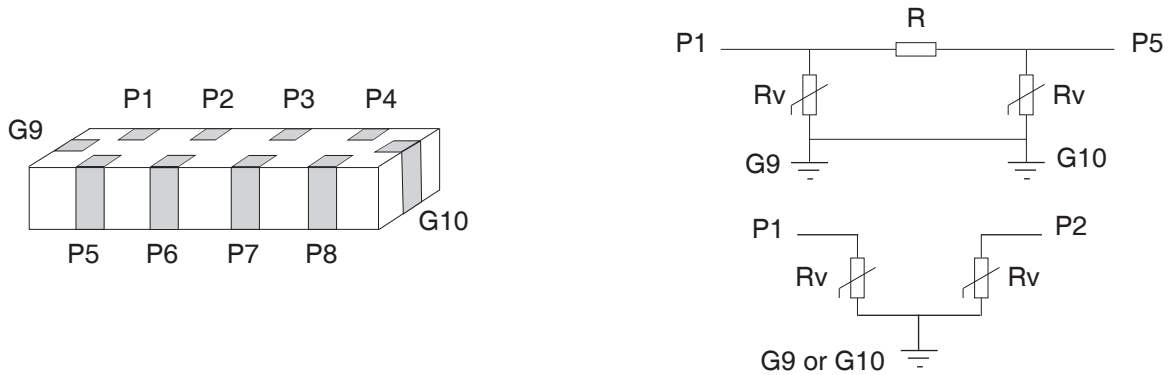


NVA0825R_, 10 TERMINATION, R-C CIRCUIT

Part Number	Max. Working Voltage <20mA		DC Resistance (Ω)	Varistor Voltage @1mA DC (Volts)	Max. Clamping Voltage		Rated Single Pulse Transient Peak Current 8/20 μ s (Amps ₃)	Cut Off Frequency / fO	Typical Cap. @0.5Vrms, 1MHz (pF)
	VDC	VAC RMS			8/20 μ s (Volts ₁)	ESD (Volts ₂)			
NVA0825RC_5R5C500TRF	5.5	4	100 Ω \pm 30%	10 ~ 14	18	23	10	50	50
NVA0825RA_140C100TRF	14	10	30 Ω \pm 30%	16 ~ 22	30	39	2	100	10
NVA0825RB_140C100TRF	14	10	50 Ω \pm 30%	16 ~ 22	30	39	2	100	10
NVA0825RC_140C100TRF	14	10	100 Ω \pm 30%	16 ~ 22	30	39	2	100	10
NVA0825RD_140C100TRF	14	10	10 Ω \pm 30%	16 ~ 22	30	39	2	100	10
NVA0825RA_180C150TRF	18	12.7	30 Ω \pm 30%	22 ~ 28	40	48	2	100	15
NVA0825RB_180C150TRF	18	12.7	50 Ω \pm 30%	22 ~ 28	40	48	2	100	15
NVA0825RC_180C150TRF	18	12.7	100 Ω \pm 30%	22 ~ 28	40	48	2	100	15
NVA0825RD_180C150TRF	18	12.7	10 Ω \pm 30%	22 ~ 28	40	48	2	100	15

"_" = Add Capacitance Tolerance: N = \pm 30%, Y = +100%/-50%

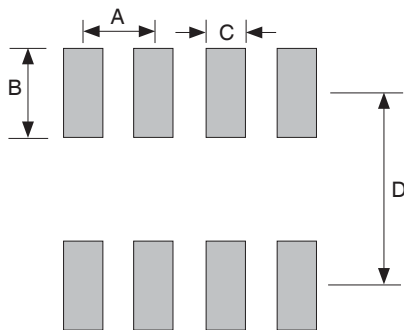
NVA0825R_ 10 TERMINATION R-C CIRCUIT



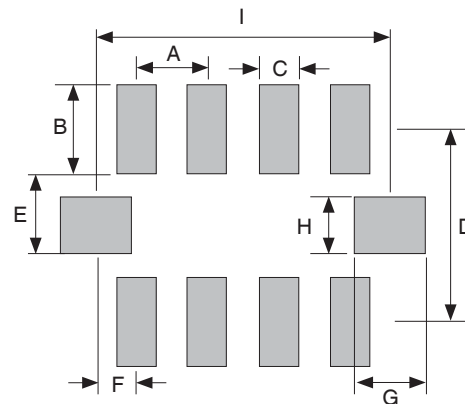
RECOMMENDED LAND PATTERN DIMENSIONS (mm)

Type	A	B	C	D	E	F	G	H	I
NVA0805	0.28	0.625	0.5	1.37	/	/	/	/	/
NVA0825					0.575	0.20	0.50	0.40	1.90

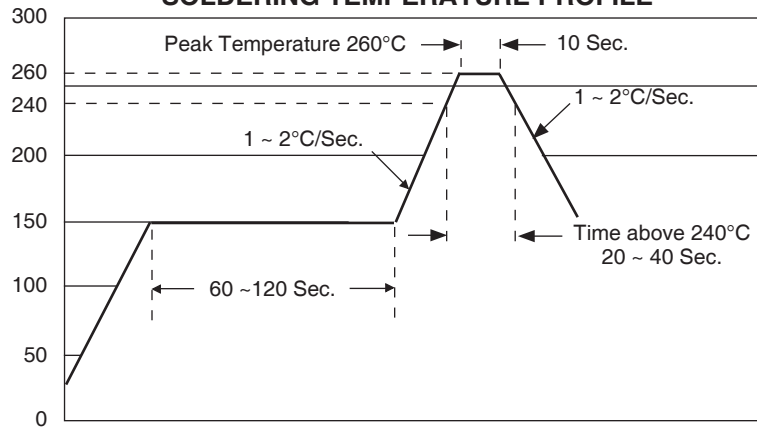
NVA0805 8 TERMINATIONS



NVA0825 10 TERMINATIONS



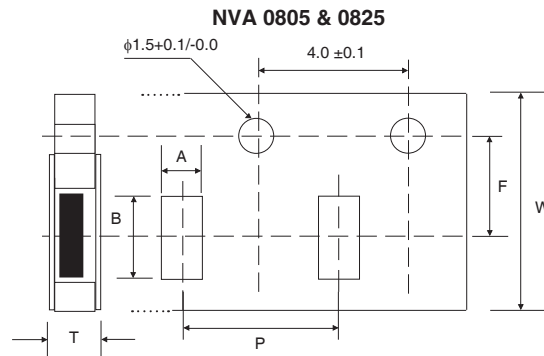
RECOMMENDED REFLOW SOLDERING TEMPERATURE PROFILE



Note: 2 times maximum reflow

CARRIER DIMENSIONS (mm) AND REEL QUANTITY

Type	A	B	P	T	F	W	Reel Quantity
NVA0805	1.50	2.30	4.00	1.10	3.5 ± 0.05	8.0 ± 0.3	4,000
NVA0825							



REEL DIMENSIONS (mm)

A	B	C	W
178 ± 2.0	58 ± 2.0	13.5 ± 0.2	9.0 ± 1.5

