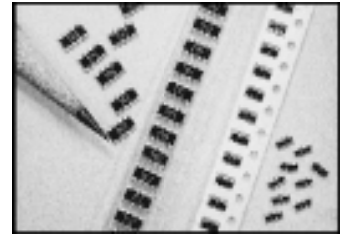


FEATURES

- SUPER MINIATURE SIZE AND LOW PROFILE
- HIGH DENSITY PACKAGING OFFERS SIGNIFICANT SPACE SAVINGS
- LOWER PRODUCTION COSTS WITH LESS PLACEMENT (UP TO 8 RESISTORS IN ONE PACKAGE)
- STANDARD FOOTPRINTS MAKE CONVERSIONS EASY
- BOTH FLOW AND REFLOW SOLDERING APPLICABLE

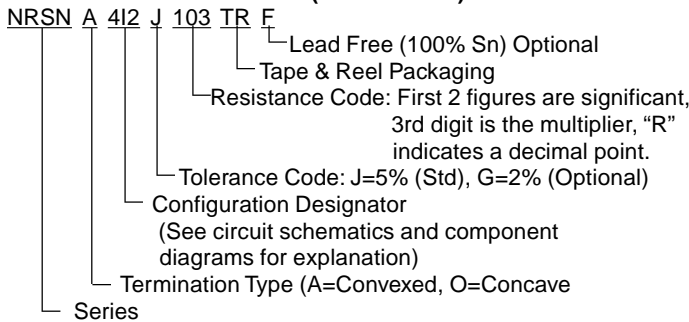


SPECIFICATIONS

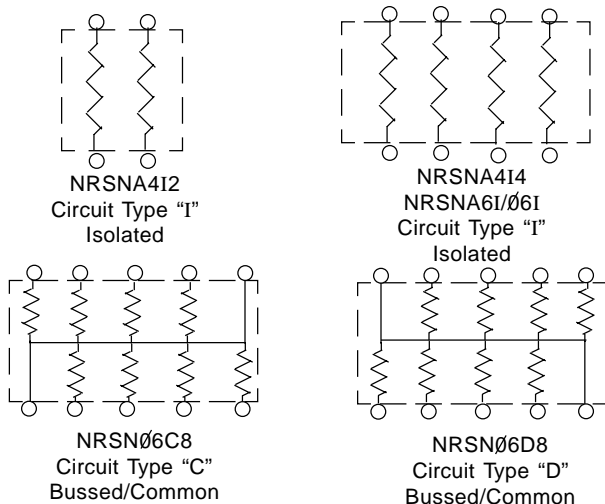
Part Type	NRSNA4I2	NRSNA4I4	NRSNØ6I4	NRSNA6I4	NRSNØ6C NRSNØ6D	NRSN12I4
Termination Type	Convex	Convex	Concave	Convex	Concave	Concave
Size W x L (mm)	1.0 x 1.0	1.0 x 2.0	1.6 x 3.2		3.1 x 6.4	3.0 x 5.1
No. of Resistors & Circuit	2R Isolated	4R Isolated	4R Isolated		8R Common	4R Isolated
Power Rating per Resistor @ +70°C	1/16 (.0625) W	1/32 (.0315) W	1/16 (0.0625) Watt			1/8 (0.125) Watt
Resistance Tolerance	J(5%) or G(2%)	J(5%) or G(2%)	J(5%) or G(2%)		+/-5% (J)	+/-5% (J) +/-2% (G)
Resistance Range	10Ω-1MΩ		10Ω-1MΩ	10Ω-1MΩ	100Ω-470KΩ	10Ω-1MΩ 47Ω-1MΩ
Maximum Working Voltage*	25V		50V			75V
Maximum Overload Voltage	50V		100V			125V
Operating Temperature Range	-55°C~-+125°C (derated as shown)					
Temperature Coefficient	+250 ppm/°C		+/-200ppm/°C (less than 47Ω = +/-300ppm/°C)			

* Maximum allowable continuous voltage for all resistors is the lower of the two values: "MAXIMUM WORKING VOLTAGE" as specified, or $\sqrt{\text{Power rating (WATTS)} \times \text{Resistance (OHMS)}}$

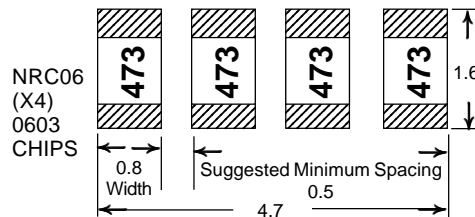
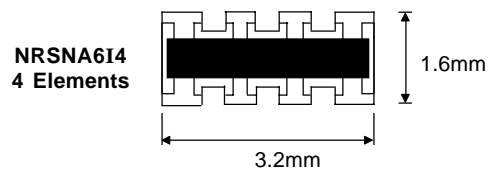
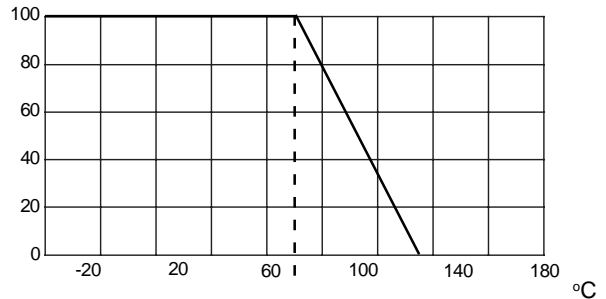
PART NUMBERING SYSTEM (E-24 VALUES)



CIRCUIT SCHEMATICS



Power Derating Curve: For operation above 70°C, power rating must be derated according to the following chart:



Note 1:

Zero ohm versions (R<0.050 ohms) are available in the following parts:
 NRSNA4I2ZOTR - 0.5A/element (no markings)
 NRSNA4I4ZOTR - 0.5A/element (marked "R00")
 NRSNØ6I4ZOTR - 1.0A/element (marked "Ø00")
 NRSNA6I4ZOTR - 1.0A/element (marked "R00")
 NRSN12I4ZOTR - 1.5A/element (marked "Ø00")

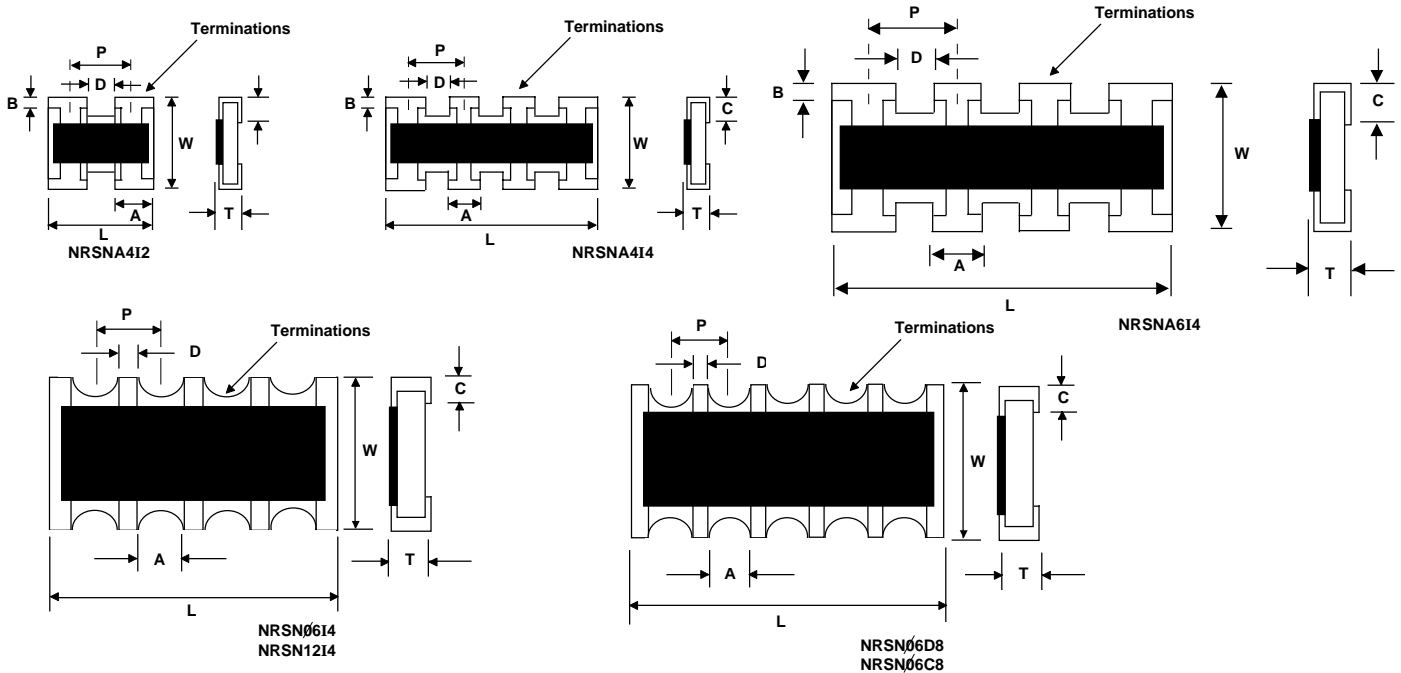
SURFACE MOUNT



PART DIMENSIONS (mm)

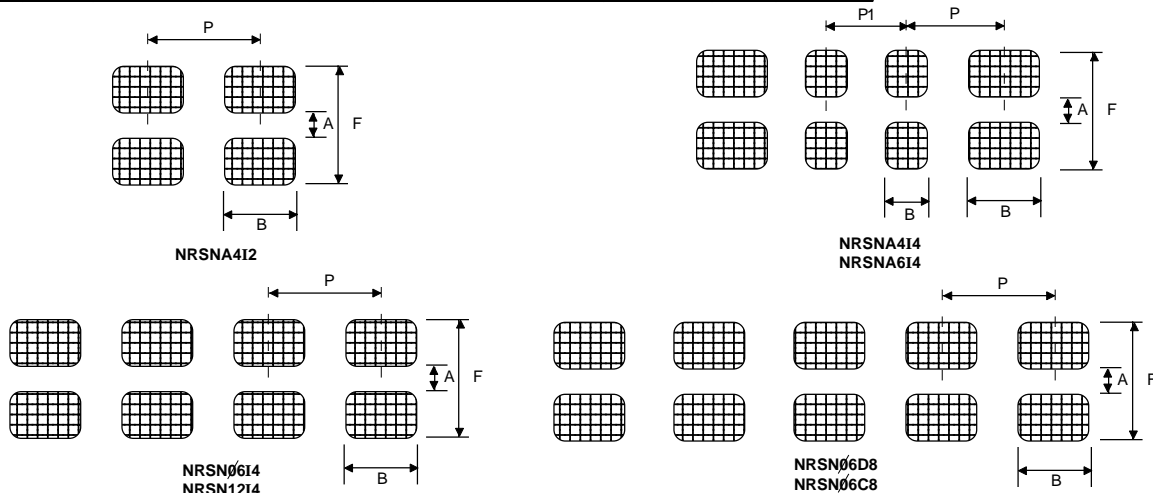
Type	W	L	P	T	A	B	C	D
NRSNA4I2	1.0 ± 0.2	1.0 ± 0.1	0.65 nom.	0.35 ± 0.1	0.33 ± 0.05	0.15 nom.	0.25 ± 0.05	0.20 ± 0.15
NRSNA4I4		2.0 ± 0.2	0.5 ± 0.15		0.3 ± 0.1		0.25 ± 0.1	
NRSNØ6I4	1.6 ± 0.2	3.2 ± 0.2	0.8 ± 0.15	0.6 ± 0.2	0.4 ± 0.15	0.3 ± 0.2	0.4 ± 0.2	-
NRSNA6I4	1.6 ± 0.2	3.2 ± 0.2	0.8 ± 0.15	0.5 ± 0.2	0.5 ± 0.15	0.3 ± 0.2	0.2+0.2/-0.1	0.38 ± 0.03
NRSNØ6C8 NRSNØ6D8	3.1 ± 0.2	6.4 ± 0.2	1.27 ± 0.2	0.6 ± 0.2	1.0 ± 0.2	0.55 ± 0.2	0.5 ± 0.2	-
NRSN12I4	3.0 ± 0.2	5.08 ± 0.2	1.27 ± 0.2	0.7 ± 0.2	0.8 ± 0.2	0.6 ± 0.2	0.6 ± 0.2	-

SURFACE MOUNT



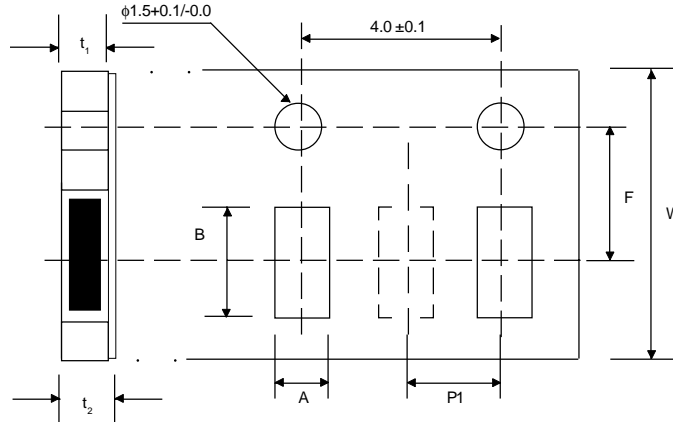
LAND PATTERN DIMENSIONS (mm)

Type	Reflow Soldering						Flow Soldering			
	A	B	B1	P	P1	F	A	B	P	F
NRSNA4I2	0.5	0.45	-	0.6	-	1.5	-	-	-	-
NRSNA4I4			0.25		0.5					
NRSNØ6I4	0.8	0.5	-	0.8	-	2.6	0.7~0.9	0.3~0.35	0.8	4.6~5.6
NRSNA6I4		0.5 ~ 0.7	0.5							
NRSNØ6C8 NRSNØ6D8	2.2	0.5	-	1.27	-	4.2	1.9~2.1	0.5~0.55	1.27	5.6~6.2
NRSN12I4	2.2	0.7	-	1.27	-	4.2	1.0~1.2	0.4~0.45	1.27	5.6~6.2



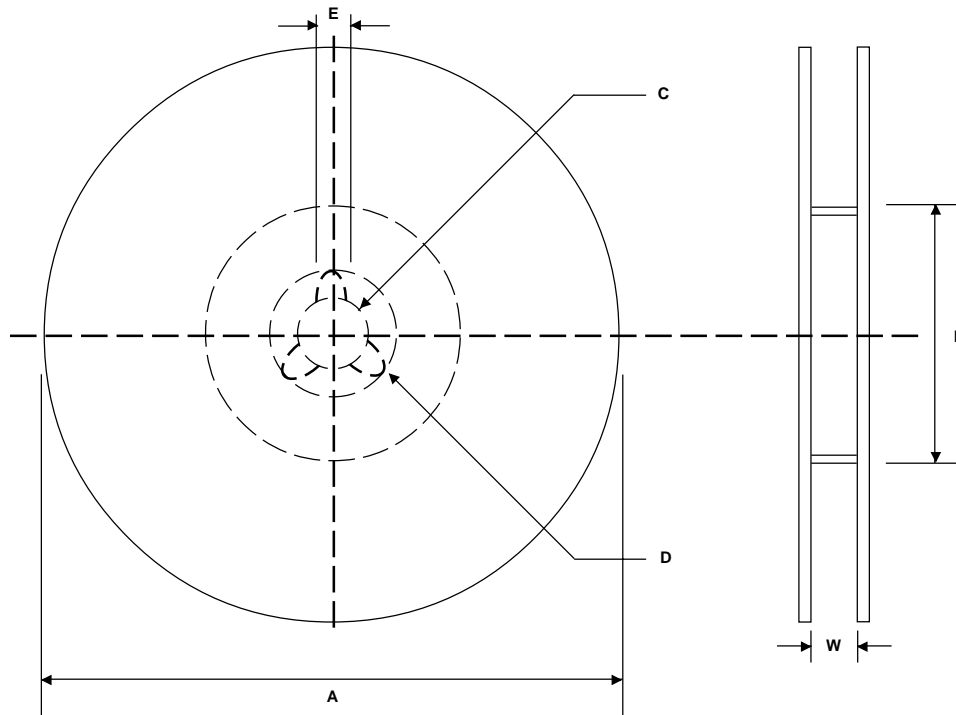
TAPE DIMENSIONS (mm)

TYPE	Material	A	B	F	P ₁	W	t ₁	t ₂
NRSNA4I2	Paper	1.17+0.1	1.17+0.1	3.5+0.05	2.0+0.05	8.0+0.2	0.5max.	1.0max.
NRSNA4I4	Paper	1.3+0.2	2.3+0.2					
NRSNØ6I4 NRSNA6I4	Paper	2.0+0.1	3.6+0.1	3.5+0.05	4.0+0.1	8.0+0.2	1.0max.	1.4max.
NRSNØ6C8 NRSNØ6D8	Plastic	3.5+0.1	6.75+0.1	5.5+0.05	4.0+0.1	12.0+0.2	1.0max.	1.4max.
NRSN12I4	Plastic	3.5+0.1	5.7+0.1	5.5+0.05	4.0+0.1	12.0+0.2	1.0max.	1.4max.



REEL DIMENSIONS (mm)

Type	A	B	C	D	E	W	Qty/Reel
NRSNA4I2 NRSNA4I4	$\phi 180$ $-4.0+3.0$	$\phi 60$ $+1.0-0.0$	$\phi 13.0$ $+2.0$	$\phi 21.0$ $+1.0$	2.0 $+0.5$	8.0 $+0.2$	10,000
NRSNØ6I4 NRSNA6I4		$\phi 80$ $+2.0$				10 $+1.0$	5,000
NRSNØ6C8 NRSNØ6D8		$\phi 80$ $+2.0$	14 $+2.0$	4,000			
NRSN12I4		$\phi 80$ $+2.0$	14 $+2.0$	4,000			



SURFACE MOUNT