

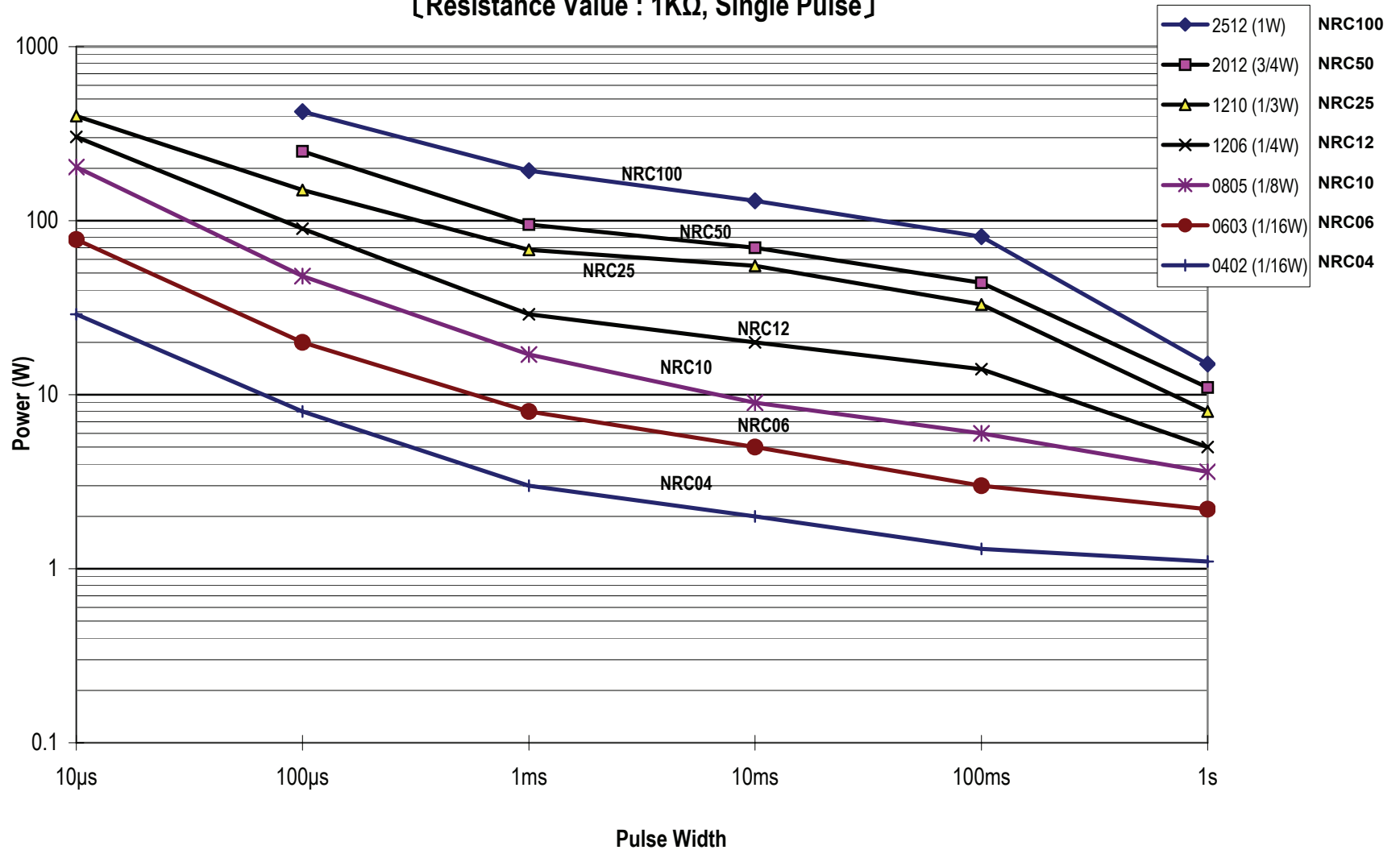


NIC COMPONENTS CORP.  
www.niccomp.com

Technical Inquiries: tpmg@niccomp.com

1/25/06

## PULSED POWER CHARACTERISTICS NRC SERIES - THICK FILM CHIP RESISTORS [Resistance Value : 1KΩ, Single Pulse]



ISO 9001:2000 REGISTERED



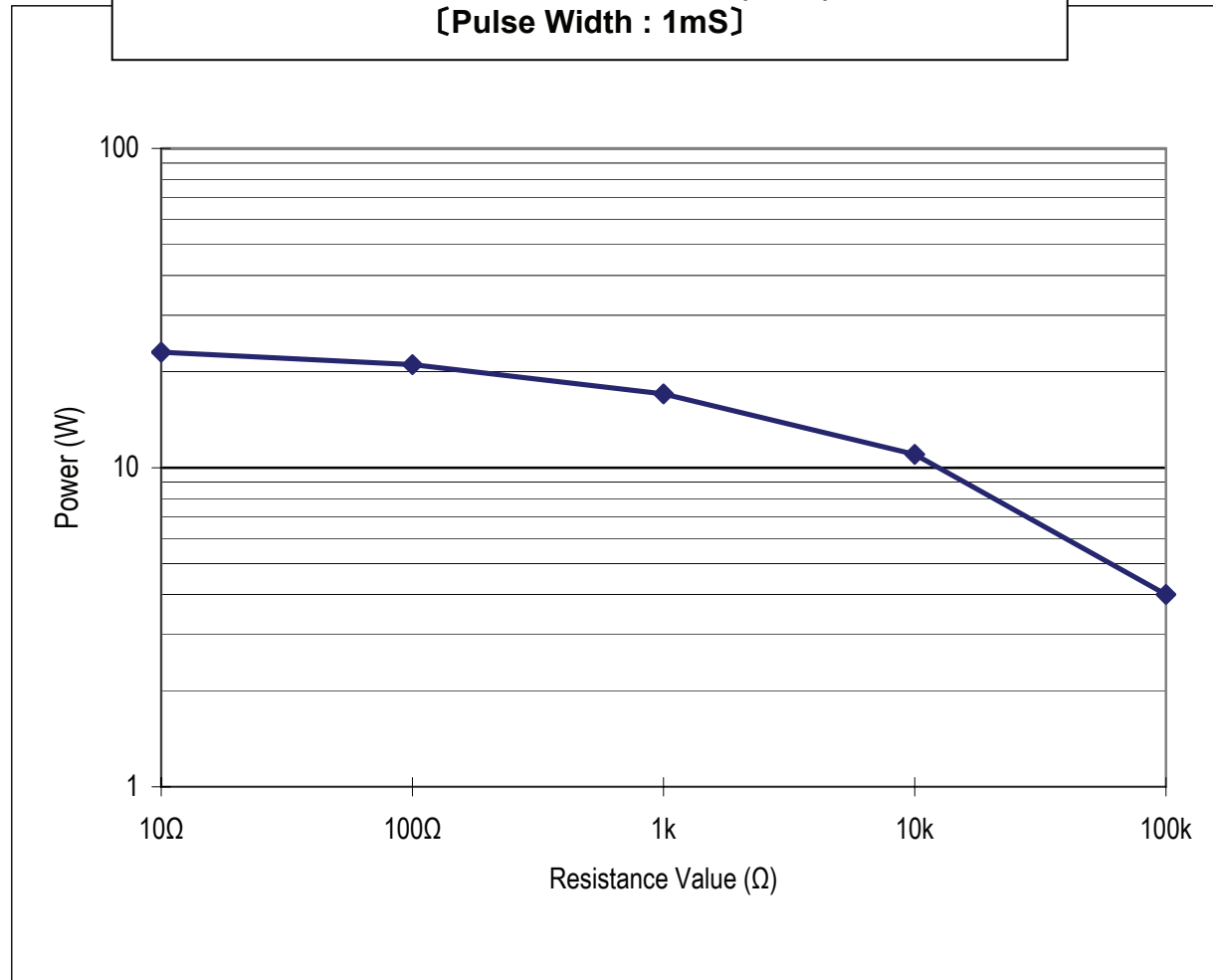
NIC COMPONENTS CORP.  
www.niccomp.com

Technical Inquiries: [tpmg@niccomp.com](mailto:tpmg@niccomp.com)

1/25/06

## PULSED POWER CHARACTERISTICS NRC SERIES - THICK FILM CHIP RESISTORS

**RESISTANCE VALUE INFLUENCE ON PULSED POWER  
CHARACTERISTIC OF 0805 SIZE (1/8W) NRC10  
[Pulse Width : 1mS]**



ISO 9001:2000 REGISTERED



NIC COMPONENTS CORP.  
www.niccomp.com

Technical Inquiries: [tpmg@niccomp.com](mailto:tpmg@niccomp.com)

1/25/06

## PULSED POWER CHARACTERISTICS NRC SERIES - THICK FILM CHIP RESISTORS

**MAXIMUM PULSED VOLTAGE:** (PER JIS C 5202, SECTION 5.11)

$$E_p = \sqrt{P \times R \times (1/(T \times F))}$$

$E_p$  = RATED PULSED VOLTAGE

$P$  = RATED DISSIPATION AT DC (W)

$R$  = RESISTANCE VALUE ( $\Omega$ )

$T$  = PULSE DURATION (SECOND)

$F$  = FREQUENCY OF PULSE (Hz)

MAXIMUM PULSED VOLTAGE =  $E_p$  **or** MAXIMUM OVERLOAD VOLTAGE, WHICHEVER IS LESS.

---

**Special Pulsed Power Test (Exceeding The Above Conditions) Was Performed On Discrete Resistor And Arrays**

**NIC SINGLE PULSE POWER TEST (Performed September 1999):**

CONDITIONS: POWER: **100W** PULSE DURATION: **5ms** (ONE SHOT)

DUT: 0402, 0603, 0805, 12106, 1210, 2010, 2512 SIZE CHIP RESISTORS (NRC Series)

0404, 0804, 1206, 2012 AND 2512 SIZE CHIP RESISTOR ARRAYS (NRSN Series)

POST TEST INSPECTION:

- 1.) RESISTANCE SHIFT ( $\Delta R$ ) <0.1%
- 2.) NO VISUAL DAMAGE

RESULTS: ALL COMPONENTS PASS

ISO 9001:2000 REGISTERED