

RC series Pulse Load Capability (For reference only)

**Chip Resistors Product BU
Product Marketing
Dec 2019**

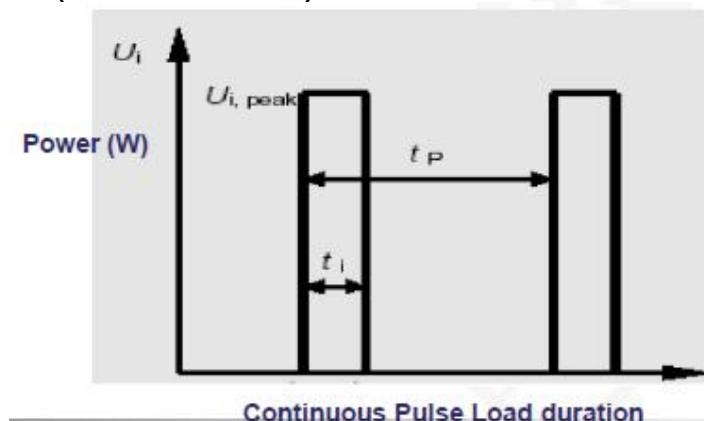
RC Single/Continuous Pulse Load test

Single Pulse Load

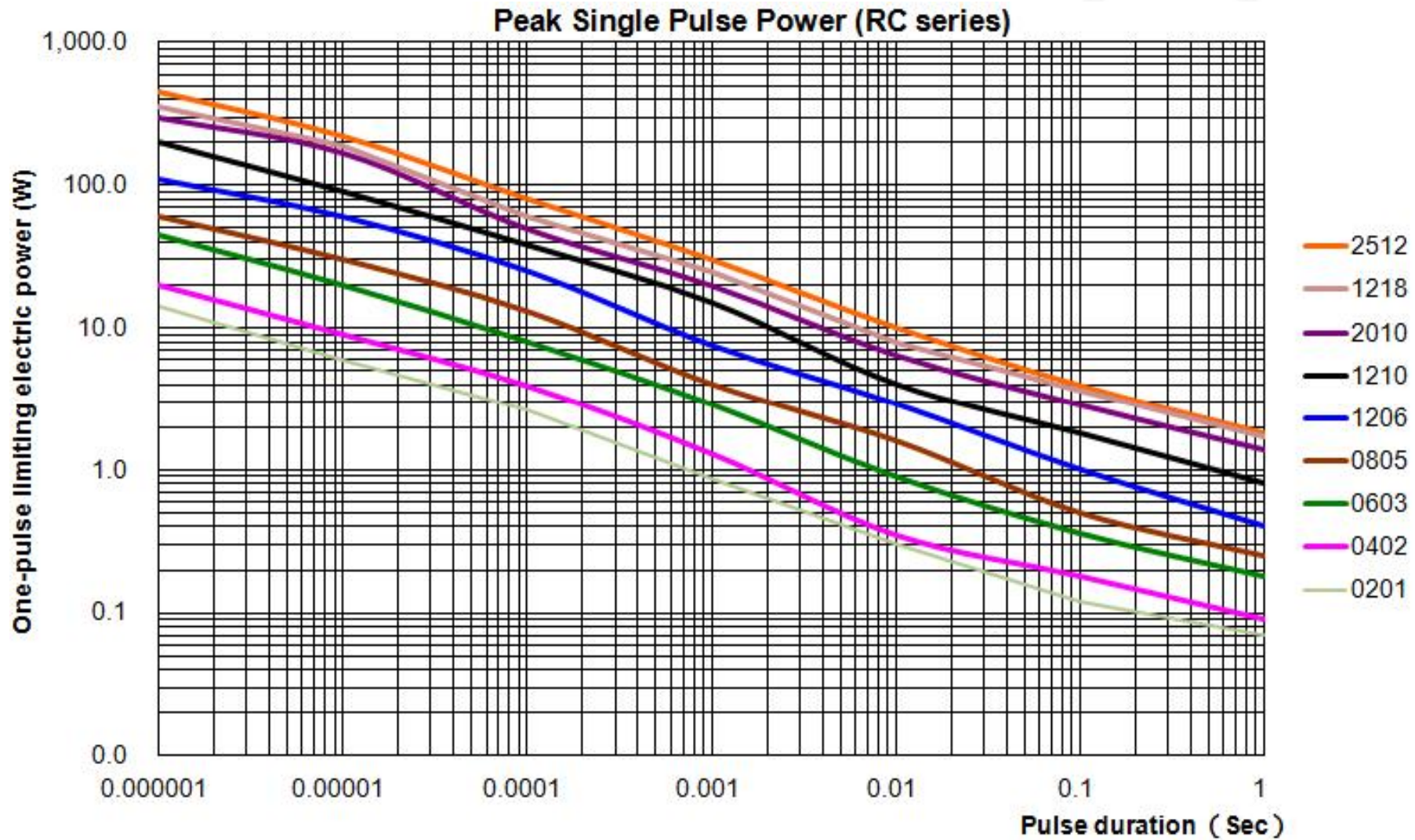
- Test Method: EN140401-802 (1.10.6.4)
- Procedure: Applied the pulse power at $t_i=1\mu\text{s}/100\mu\text{s}/1\text{ms}/10\text{ms}/100\text{ms}/1\text{s}$ (pulse duration) with single pulse. Then the resistor is measured. The rated pulse voltage calculated from the graphic. However the rated voltage shall not exceed the maximum pulse load voltage.

Continuous Pulse Load

- Applied the requested power at $t_i=1\mu\text{s}$ to 1s (pulse duration) and $t_p=100\mu\text{s}$ to 100s with 1,000 cycles respectively. Then the resistor is measured.
- Sample type for both tests: RC series (0201/0402/0603/0805/1206/1210/1218/2010/2512)
- Requirement: $\Delta R/R \leq \pm(3.0+0.05 \Omega)\%$, **ALL PASS**



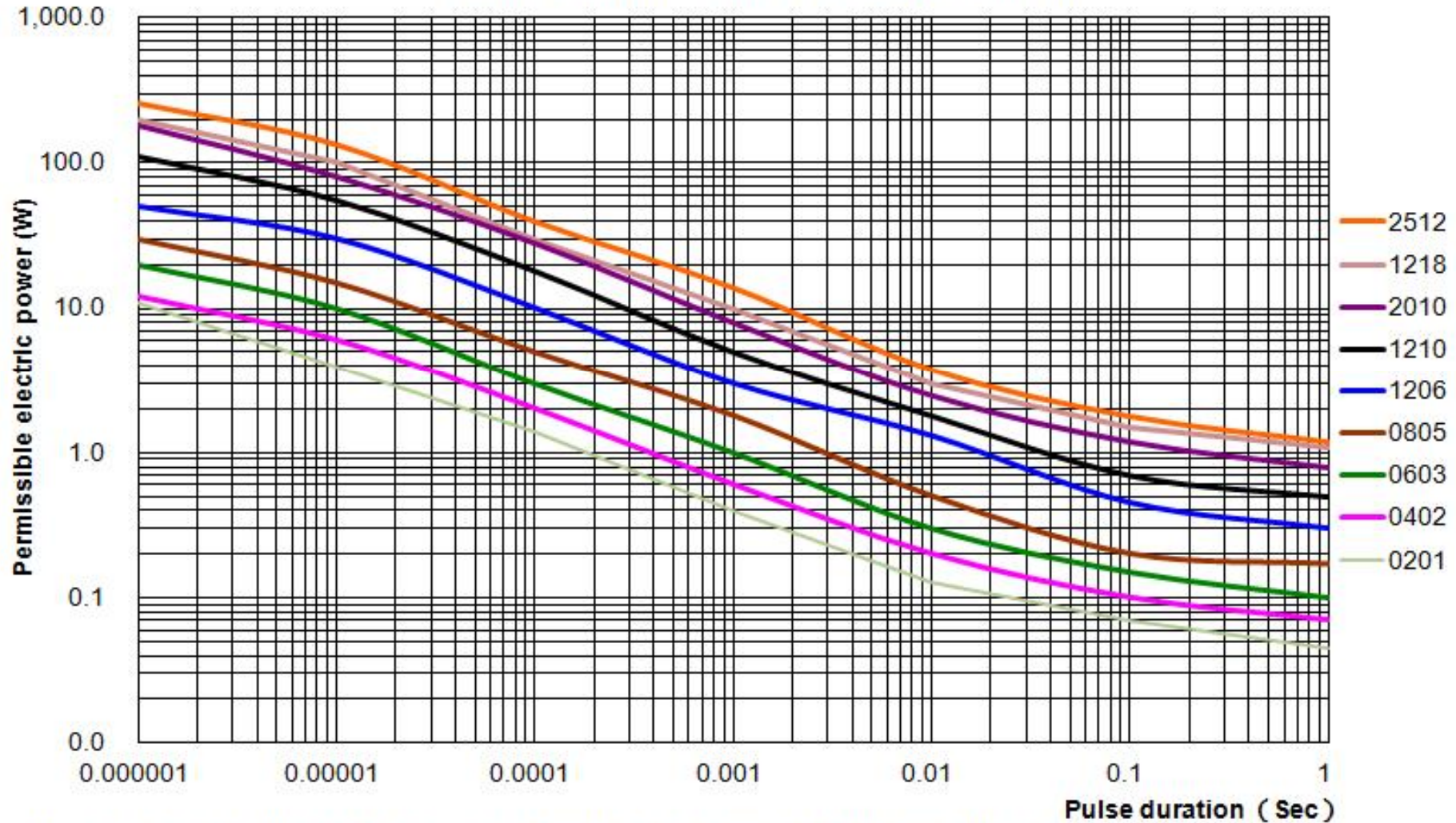
RC Single Pulse Power Curve



Maximum permissible peak pulse power as a function of pulse duration

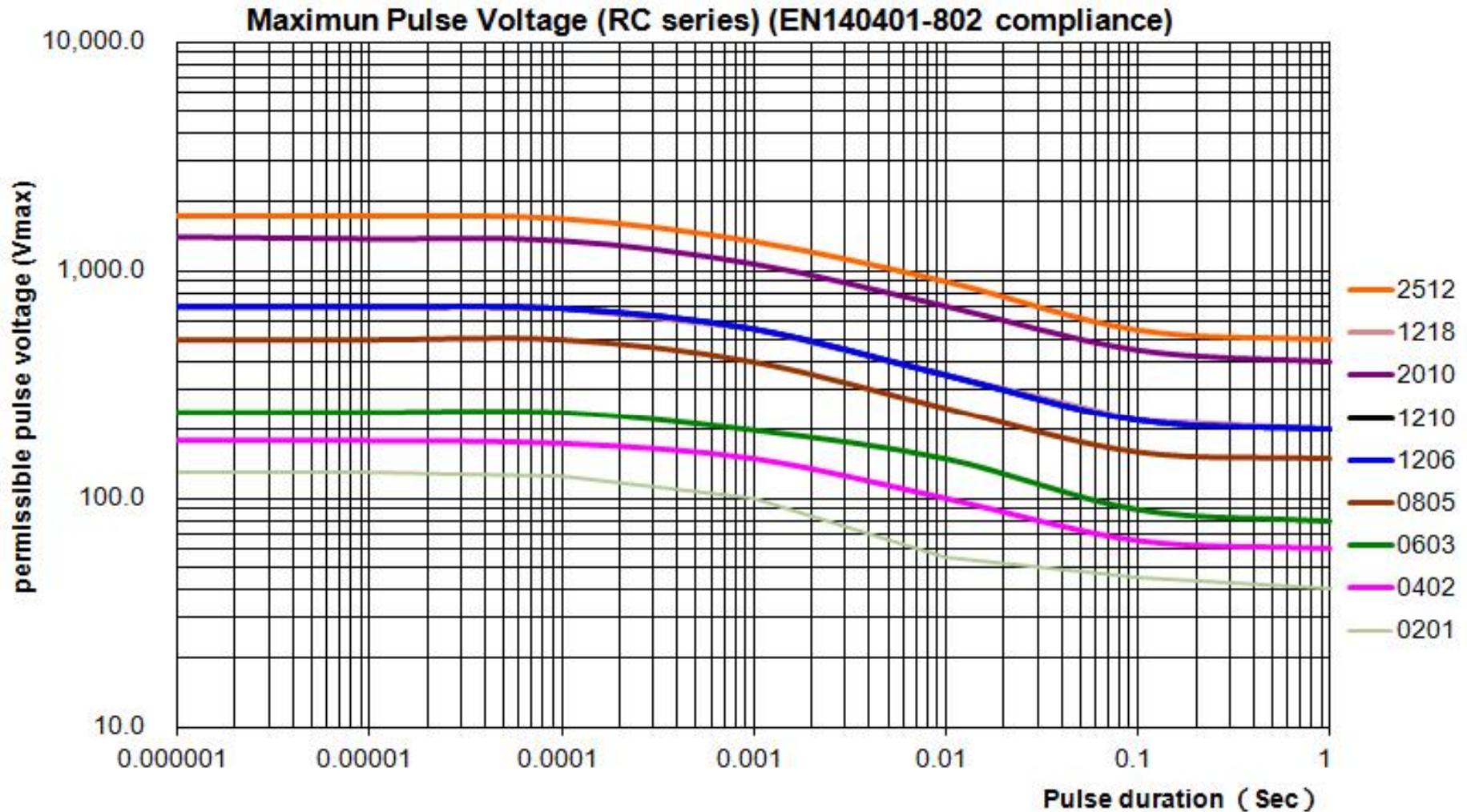
RC Continuous Pulse Power Curve

Peak Continuous Pulse Power (RC series)



Maximum permissible peak continuous pulse power as a function of pulse duration

RC Maximum Pulse Voltage Curve



Maximum permissible peak pulse voltage as a function of pulse duration

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Thank you