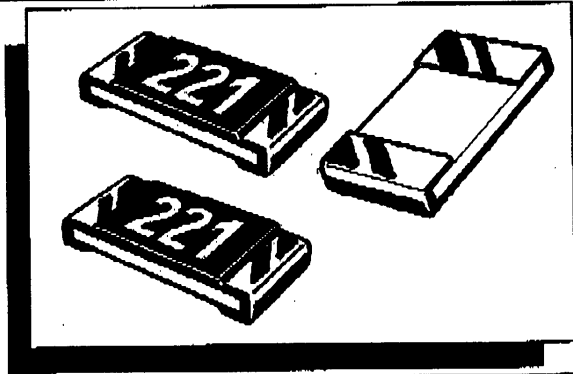


# MEGGITT CGS

**HIGH VOLTAGE RESISTORS  
HIGH VALUE RESISTORS  
HIGH POWER RESISTORS  
ALUMINIUM CLAD RESISTORS  
CURRENT SENSE RESISTORS**

## SMD Power Resistors **TYPE CR SERIES**



Meggitt CGS is pleased to introduce this low cost high power thick film device, suitable for auto placement in volume, and for flow and reflow soldering. It has a metal glaze resistive element and three layers of terminal material to ensure high reliability. It is attractively priced and available on 7" reels of 4000, 5000 or 10000 pieces.

### **MEGGITT CGS KEY FEATURES**

- SMALL SIZE TO POWER RATIO
- SUPPLIED ON TAPE
- AVAILABLE VIA DISTRIBUTION
- VALUE MARKED ON RESISTOR
- ATTRACTIVELY PRICED
- LABORATORY KIT AVAILABLE

**M** MEGGITT  
ELECTRONIC  
COMPONENTS

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**ELECTRICAL**

Part Number	Package Size	Power Rating at 70°C (Watts)	Maximum Working Voltage	Max. Overload Voltage	Resistance Stability	Resistance Range (ohms)	Temperature Range
CR1E	0402	0.063	50V	100V	3%	See Below	-55°C to +125°C
CR1J	0603	0.100	50V	100V	3%	See Below	-55°C to +125°C
CR2A	0805	0.125	150V	300V	3%	See Below	-55°C to +125°C
CR2B	1206	0.250	200V	400V	3%	See Below	-55°C to +125°C
CR3A	2512	** 1.00	200V	400V	3%	See Below	-55°C to +125°C

\* - See Note 1 - Page 3

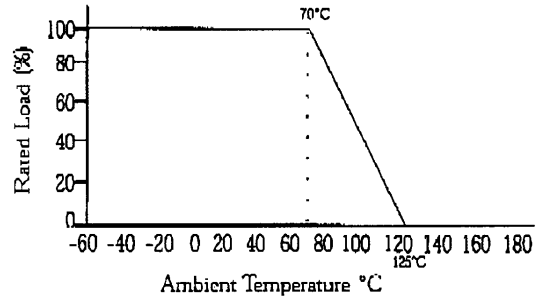
\*\* - See Note 2 - Page 3

**RESISTANCE VALUE / TOLERANCE**

Part Number	Resistance Tolerance	Tolerance Code	Resistance Value Grid	Temperature Coefficient	Resistance Value Range
CR1E	1%	F	E-96	±100 ppm/°C	10R to 1M0
	5%	J	E-24	+350 ppm/°C	1R0 to 9R1
	2%/5%	G/J	E-24	±200 ppm/°C	10R to 3M3
CR1J	1%	F	E-96	±100 ppm/°C	10R to 1M0
	2%	G	E-24	±200 ppm/°C	10R to 4M7
	5%	J	E-24	±350 ppm/°C	1R0 to 9R1
			E-24	±200 ppm/°C	10R to 10M
CR2A	1%	F	E-96	±100 ppm/°C	10R to 1M0
	2%/5%	G/J	E-24	±350 ppm/°C	1R0 to 9R1
	2%/5%	G/J	E-24	±200 ppm/°C	10R to 10M
CR2B	1%	F	E-96	±100 ppm/°C	10R to 1M0
	2%/5%	G/J	E-24	±350 ppm/°C	1R0 to 9R1
	2%/5%	G/J	E-24	±200 ppm/°C	10R to 10M
CR3A	1%	F	E-96	±100 ppm/°C	10R to 1M0
	2%	G	E-24	±350 ppm/°C	1R0 to 9R1
	2%/5%	G/J	E-24	±200 ppm/°C	10R to 1M0

**POWER DERATING CURVE**

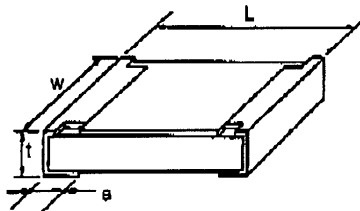
For resistors operated in ambient temperatures above 70°C, power rating must be derated in accordance with the curve right.



**Note 1.** Rated continuous working voltage (RCWV) shall be determined from  $RCWV = \sqrt{\text{Rated Power} \times \text{Resistance Value}}$ , or Maximum RCWV listed above, whichever less.

**Note 2.** If this device is anticipated to run at full continuous power then action to improve the cooling should be taken. This can be a metal substrate, copper pad left under the chip, an opening in the PCB or enlarged silver conductor pads each end.

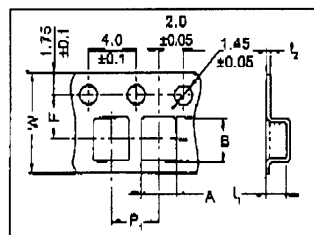
**DIMENSIONS**



Part Number	Package Size	Length (L)	Width (W)	Thickness (t)	Terminal (a)
CR1E	0402	1.0 ± 0.1	0.5 ± 0.1	0.35 ± 0.05	0.25 ± 0.1
CR1J	0603	1.6 ± 0.1	0.8 ± 0.1	0.45 ± 0.1	0.30 ± 0.1
CR2A	0805	2.1 ± 0.2	1.3 ± 0.1	0.50 ± 0.1	0.30 ± 0.2
CR2B	1206	3.1 ± 0.2	1.55 ± 0.1	0.55 ± 0.1	0.40 ± 0.2
CR3A	2512	6.4 ± 0.2	3.2 ± 0.2	0.60 ± 0.1	0.70 ± 0.2

**PACKAGING**

Part Number	Package Size	Tape Width (W)	Pitch (P0)	Blister Width (A)	Blister Length (B)	Sprocket Location (F)	Tape Thickness (L)	Tape Thickness (L)	Reel Diameter	Reel Quantity
CR1E	0402	8.0	2.0	0.63 ± 0.05	1.13 ± 0.05	3.5 ± 0.05	0.55 ± 0.10	0.5 maximum	180.0	10000
CR1J	0603	8.0	4.0	1.10 ± 0.20	1.90 ± 0.20	3.5 ± 0.05	0.70 ± 0.10	0.8 maximum	180.0	5000
CR2A	0805	8.0	4.0	1.65 ± 0.20	2.40 ± 0.20	3.5 ± 0.05	0.90 ± 0.10	1.0 maximum	180.0	5000
CR2B	1206	8.0	4.0	2.00 ± 0.15	3.60 ± 0.20	3.5 ± 0.05	0.90 ± 0.10	1.0 maximum	180.0	5000
CR3A	2512	12.0	4.0	3.40 ± 0.10	6.60 ± 0.10	5.5 ± 0.05	1.00 ± 0.10	-	180.0	4000



**HOW TO ORDER**

Common Part	Package Size	Resistance Value	Tolerance	Pack Style	
CR - Thick Film Chip Resistor	1E - 0402 Series 1J - 0603 Series 2A - 0805 Series 2B - 1206 Series 3A - 2512 Series	1 ohm 1000 mill ohms 1K Ohm 1000 ohms 1 Meg Ohm 1000000 ohms	1R0 1K0 1M0	F - 1% G - 2% J - 5%	T - 7" Reels (See Above for Reel Quantity)

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