CLR Series

Thick Film Chip Resistor

- **Resistances from 1 to 10MOhms**
- **Power Rating 0.05 to 1 Watt**
- **Resistance Tolerances to ± 1%**
- **TCR's to ±100 ppm/°C**
- **Sizes: 0201 / 0402 / 0603 / 0805 / 1206 / 1210 / 2010 and 2512**

SPECIFICATIONS

Type	CLR0201	CLR0402	CLR0603	CLR0805	CLR1206	CLR1210	CLR2010	CLR2512
Power Rating (W) at 70°C	0.05	0.06	0.1	0.125	0.25	0.3	0.5	1.0
Resistance Range (Ω) (1% - E24 and E96) (5% - E24)	10 to 1M	1 to 10M						
Tolerances	1% / 5%							
Temperature Coefficient (depending on ohmic value)	±100 to ±200							
Max. Operating Voltage (V)	15	50	50	150	200	200	200	200
Dimensions (LxW) mm [inches]	0.60 x 0.30 [0.02 x 0.01]	1.00 x 0.50 [0.04 x 0.02]	1.60 x 0.80 [0.06 x 0.03]	2.00 x 1.25 [0.08 x 0.05]	3.10 x 1.55 [0.12 x 0.06]	3.10 x 2.50 [0.12 x 0.10]	5.00 x 2.50 [0.20 x 0.10]	6.30 x 3.20 [0.25 x 0.12]
Packaging (pcs) Tape and Reel	10,000		5,000				4,000	

Test	Specification	Test Method
Temperature Coefficient of Resistance	see above	JIS-C-5202 5.2 / IEC 60115-1 4.8 +25/-55/+25/+125, +155/+25°C
Thermal Shock	±(1.0%+0.05Ω)	MIL-STD-202F, Method 107 -55°C~125,155°C,5 cycles
Short Time Overload	±(2.0%+0.05Ω)	MIL-R-55342D 4.7.5 RCWV*2.5 or Max Overloading Voltage, 5 seconds
High Temperature Exposure	±(2.0%+0.05Ω)	MIL-R-55342D 4.7.6 1000 hours @ +125°C without load
Load Life	±(3.0%+0.05Ω)	MIL-STD-202F M108 RCWV, 70°C, 1.5 hours on, 0.5 hours off total 1000~1048 hours
Resistance to Soldering Heat	±(1.0%+0.05Ω)	MIL-R-55342D 4.7.7 260±5°C, 10±1seconds
Moisture Resistance	±(2.0%+0.05Ω)	MIL-STD-202F, Method 103 40°C, 90~95%RH, 1000 hours
Low Temperature Operation	±(1.0%+0.05Ω)	MIL-R-55342D 4.7.4 1hour, -55°C, followed by 45 minutes of RCWV
Bending Strength	±(1.0%+0.05Ω)	JIS-C-5202 6.1.4 5 mm deflection in either direction, 10 seconds
Solderability	95% min coverage	MIL-STD-202F-Method 208H 235±5°C,2±0.5seconds

Ordering Information

Part Description: Part Type - Resistance - Tolerance - TCR - Packaging
Example: CLR 2010 10Ohms 1%
(Note: if no TCR is specified: The highest value will be supplied)