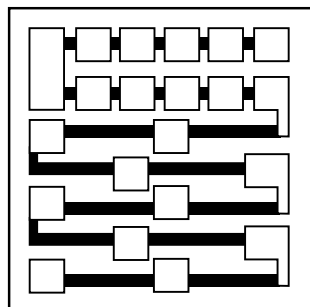


**THIN FILM RESISTOR SERIES**

California Micro Devices' 110R Series multi-terminal resistor chip offers the hybrid designer a component that provides a wide range of resistance values on a single chip. Bonding pads segment the total resistance into ten single elements of resistance and ten 10X elements of resistance enabling the combination of the eight standard parts to cover the resistance range from 1100 ohms to 275K ohms.

ELECTRICAL SPECIFICATIONS			
Parameter	Test Condition		
TCR	-55°C to +125°C	±250ppm/°C	Max
Operating Voltage	-55°C to +125°C	100Vdc	Max
Package Power Rating	@ 70°C (Derate linearly to zero @ 150°C)	250mw	Max
Thermal Shock	Method 107 MIL-STD-202F	±0.25% @ ΔR	Max
High Temperature Exposure	100 Hrs @ 150°C Ambient	±0.25% ΔR	Max
Moisture Resistance	Method 106 MIL-STD-202F	±0.5% ΔR	Max
Life	Method 108 MIL-STD-202F (125°C/1000 hr)	±0.5% ΔR	Max
Noise	Method 308 MIL-STD-202F	-20dB	Max
Insulation Resistance	@ 25°C	1 × 10 ¹² Ω	Min

**Formats**

Die Size:
34±3 mils square
Bonding Pads:
4x4 mils typical

VALUES		
Part Number	Total Resistance	Nominal/Single Element of Resistance
110R 1101X	1100Ω	10
110R 2751X	2750Ω	25
110R 5501X	5500Ω	50
110R 1102X	11000Ω	100
110R 2752X	27500Ω	250
110R 5502X	55000Ω	500
110R 1103X	110000Ω	1000
110R 2753X	275000Ω	2500

MECHANICAL SPECIFICATIONS	
Substrate	Silicon 10±2 mils thick
Isolation Layer	SiO ₂ 100,000Å thick, min
Backing	Lapped (gold optional)
Metalization	Aluminum 10,000Å thick, min (15,000Å gold optional)

PACKAGING
Two inch square trays of 400 chips maximum.

NOTES
1. The tolerance applies to the total resistance value only.
2. Resistor pattern may vary from one value to another.

PART NUMBER DESIGNATION				
110R	5502	X	G	W
Series	Value First 3 digits are significant value. Last digit represents number of zeros. R indicates decimal point	Tolerance G = ±2% J = ±5% K = ±10% M = ±20%	Bond Pads G = Gold No Letter = Aluminum	Backing W = Gold L = Lapped No Letter = Either