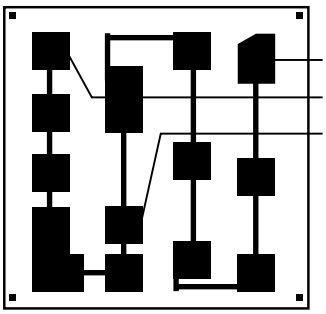
THIN FILM RESISTOR SERIES

California Micro Devices' 210R 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 five single elements of resistance and seven 5X elements of resistance enabling the combination to cover the resistance range from 800 ohms to 240K ohms.

ELECTRICAL SPECIFICATIONS			
Parameter	**Test Condition**		
TCR	-55°C to +125°C	0 to -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/1000hr)	±0.5% ΔR	Max
Noise	Method 308 MIL-STD-202F	-20dB	Max
Insulation Resistance	@ 25°C	$1 \times 10^{12}\Omega$	Min



Formats
Die Size:
30±3 mils square
Bonding Pads:
4x4 mils typical

VALUES		
Part Number	Total Resistance	Nominal/Single Element of Resistance
210R 8000X	800Ω	20
210R 2400X	2400Ω	60
210R 8001X	8000Ω	200
210R 8002X	80000Ω	2000
210R 1602X	160000Ω	4000
210R 2403X	240000Ω	6000

MECHANICAL SPECIFICATIONS	
Substrate	Silicon 10±2 mils thick
Isolation Layer	$Si0_2$ 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				
210R	**8502**	**X**	**G**	**W**
Series	Value First 3 digits are significant value. Last digit represents number of zeros. R indicates decimal point	Tolerance J = ±5% K = ±10% M = ±20%	Bond Pads G = Gold No Letter = Aluminum	Backing W = Gold L = Lapped No Letter = Either

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