

CARBON FILM FIXED RESISTORS

Features:

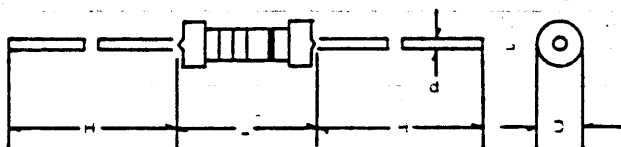
- High quality performance
- Great economy
- Flame retardant type available
- Too low or too high ohmic value can be supplied only case by case
- Automatically insertable
- Weldable type with copper plated lead wire available
- Color coating is in "Beige".
- Non flame color coating is in mixture of "Green and Grey".

Dimension

Normal Size

Style	Dimension (mm)				
	RATING	L Max.	D Max.	$d^{+0.02}_{-0.05}$	H ± 3
CR-12PS	0.125W	4.2	2.0	0.5	28
CR-25PS	0.25W	6.8	2.5	0.6	28
CR-50PS	0.5W	10	3.5	0.6	28
CR-100PS	1W	16	5.5	0.8	28
CR-200PS	2W	17.5	6.5	0.8	28

S TYPE

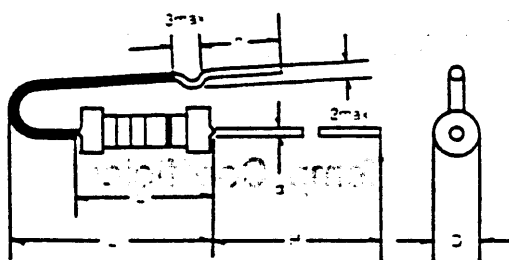


0.125W L = 3.5 Max. D = 1.85 Max.

Small Size

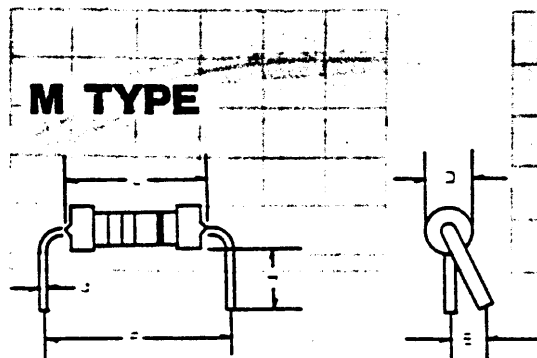
Style	Dimension (mm)				
	RATING	L Max.	D Max.	$d^{+0.02}_{-0.05}$	H ± 3
CR-25PS-S	0.25W	4.2	2.0	0.5	28
CR-50PS-S	0.5W	9	3	0.6	28
CR-50PS-SS	0.5W	6.8	2.5	0.6	28
CR-100PS-S	1W	12	5.0	0.7	28
CR-200PS-S	2W	16	5.5	0.8	28

F TYPE



Style	Dimension (mm)					
	L Max.	L ₁ Max.	D Max.	$d^{+0.02}_{-0.05}$	H ± 3	h min.
CR-12F	4.2	5.5	2.0	0.5	28	20
CR-25F	6.8	10	2.5	0.6	28	13
CR-50F	10	13	3.5	0.6	28	12

M TYPE



Style	Dimension (mm)					
	L Max.	D Max.	H Max.	F ± 1	E Max.	$d^{+0.02}_{-0.05}$
CR1/8MU	4.2	2.0	5	5	1	0.5
CR1/8MU	4.2	2.0	5	6	1	0.5
CR1/4MU	6.8	2.5	5	10	2	0.6
CR1/4MU	6.8	2.5	5	12.5	2	0.6
CR1/2MU	10	3.5	5	12.5	2	0.6
CR1/2MU	10	3.5	5	15	2	0.6

Rating

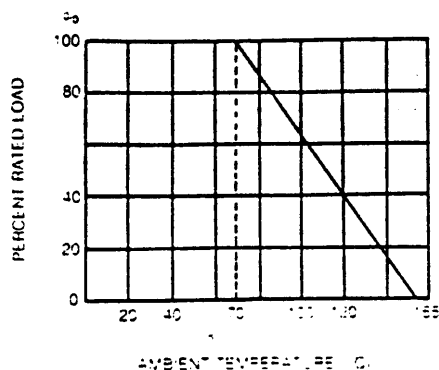
Style	Rating wattage	Max. working V.	Max. overload V.	Resistance range
CR-12	0.125W	200V	400V	1Ω—1MegΩ
CR-25	0.25W	250V	500V	1Ω—10MegΩ
CR-50	0.5W	350V	700V	1Ω—10MegΩ
CR-100	1W	500V	1,000V	1Ω—10MegΩ
CR-200	2W	500V	1,000V	1Ω—10MegΩ

Characteristics

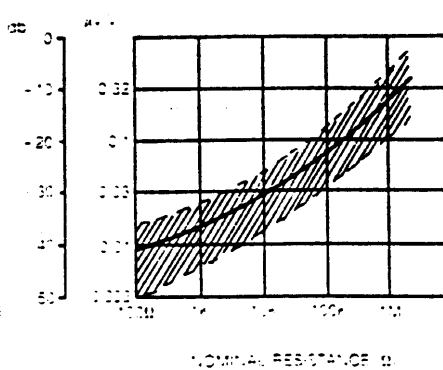
Characteristics		Limits			Test method
Operating temp. range		-55°C—+155°C			
Temp. Coefficient	Range	1Ω—91KΩ	100KΩ—1MΩ	1MΩ—10MΩ	JIS C 5202. 5. 2
	T.C.R.	0—-450	0—-700	-800—-1500	MIL-R-22684B-4. 6. 11
Current Noise	Range	1Ω—91KΩ	100KΩ—910KΩ	1MΩ—3.3MΩ	JIS C 5202. 5. 9
	μV/V	0.3	0.5		
Moisture Resistance	100KΩ	±5%			JIS C 5202. 7. 9. 1.000H
	100KΩ	±(3% - 0.05%)			MIL-R-22684B-4. 6. 10
Load life	100KΩ	±3%			JIS C 5202. 7. 10. 1.000H
	100KΩ	±(2% - 0.05%)			MIL-R-22684B-4. 6. 12
Short time overload		±(0.75% + 0.05%)			JIS C 5202. 5. 5 MIL-R-22684B-4. 6. 5
Temp. cycling		±(0.5% - 0.05%)			JIS C 5202. 7. 4 MIL-R-22684B-4. 6. 3
Resistance to soldering heat		±(0.5% + 0.05%)			JIS C 5202. 6. 4 MIL-R-22684B-4. 6. 9
Resistance to solvent		Permanent marking. No physical or electrical deterioration			

* As variances through measuring, an additional ±0.05% is added to the change rate above.

Derating Curve



Current Noise



Temp Coefficient

