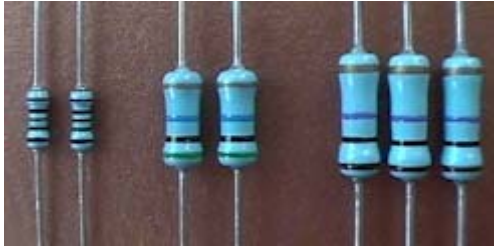


HOR

TECHNICAL INFORMATION

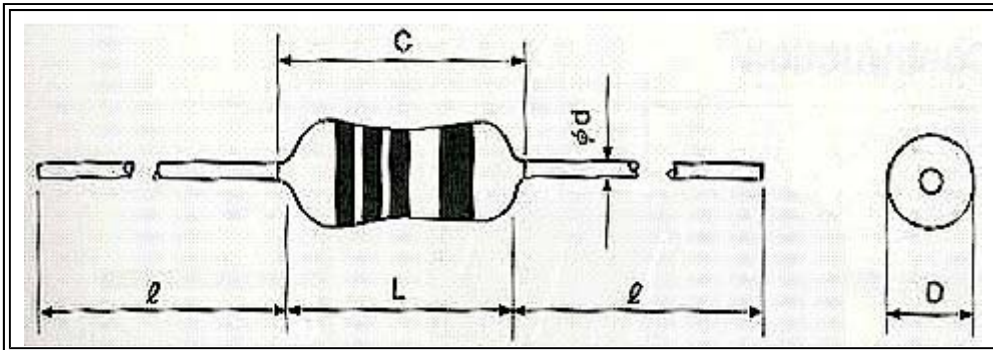


These are thick film, low cost, axial lead, color coded resistors which exhibit a high overload rating. Complete environmental protection is ensured with an epoxy coating.

HOR SPECIFICATIONS

Model	Power Rating [W]	Max. Working Voltage [V]	Max. Overload Voltage [V]	Resistance Range [Ω]	
				C($\pm 0.25\%$) F($\pm 1\%$) G($\pm 2\%$)	K($\pm 10\%$) J($\pm 5\%$)
HOR 14	0.25	500	700	100k-100M	101M-1G
HOR 12	0.5	700	1000	100k-100M	101M-1G
HOR 10	1	1000	1500	100k-100M	101M-1G
HOR 20	2	1200	1500	100k-100M	101M-1G

HOR DIMENSIONS



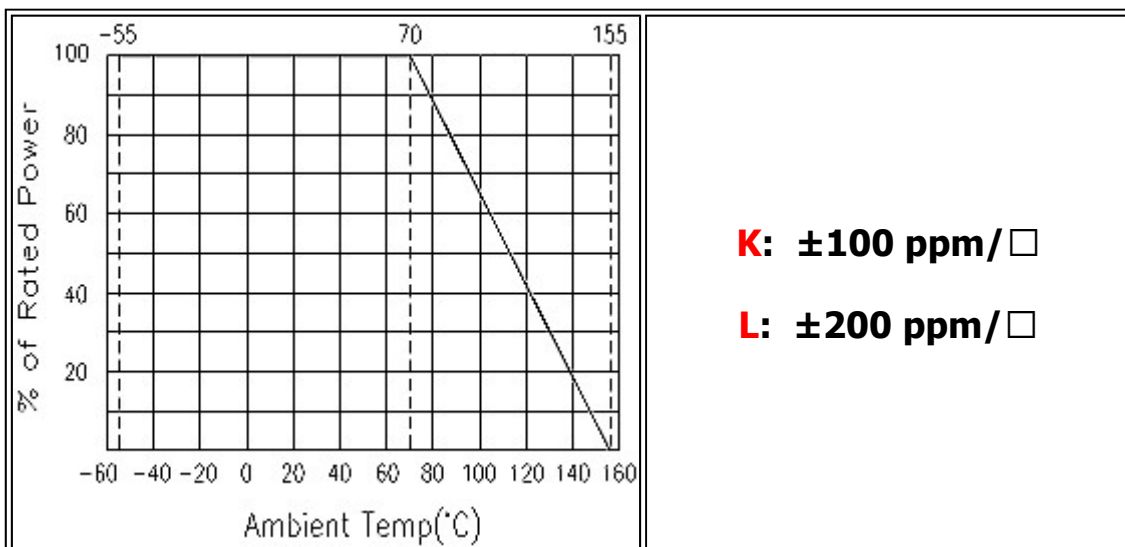
Model	Dimensions [mm]				
	L	C max.	D	d (Nominal)	$l \pm 3$
HOR 14	6.3 \pm 0.5	7.1	2.3 \pm 0.3	0.6	30
HOR 12	9.5 \pm 1.0	11.1	3.5 \pm 0.4	0.7	30

HOR 10	12±1.0	14.0	4.0±0.5	0.8	30
HOR 20	16±1.0	18.0	4.5±0.5	0.8	30

CHARACTERISTICS

Test	Limit	Condition
Tolerance [%]		±0.25(C), ±0.5(D), ±1.0(F), ±2.0(G), ±5.0 (J)
Temperature Range		-55C - 155C
Temp. Coefficient	±100 – 200 ppm/C	Room temperature, change in R taken at 100C
Short Time Overload	± 1%	Smallest of 2.5×Rated Voltage or Max. Overload Voltage for 5sec.
Moisture Resistance	± 5%	40C±2C, 90%-95%RH 1000h. 1.5h ON / 0.5h OFF cycle
Thermal Shock	± 1%	-55C(30min.) / 155C(30min.), 5 cycles
Load Life	± 5%	70C±2C 1000h. 1.5h ON / 0.5h OFF cycle
Insulation Resistance	10,000 MΩ minimum	DC 100V, 1min.
Resistance to soldering heat	± 1%	260C±5C, 10s±1s or 350C±10C, 3.5s±0.5s
Dielectric with-standing voltage	No evidence of damage	Max. working voltage / min.

DERATING AND ORDERING EXAMPLE



HOR 12	L	100kΩ	B
Model	TCR symbol	Nominal Resistance	Tolerance