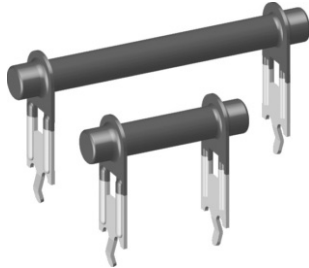


Wirewound Resistors, Commercial Power, Radial Terminals



FEATURES

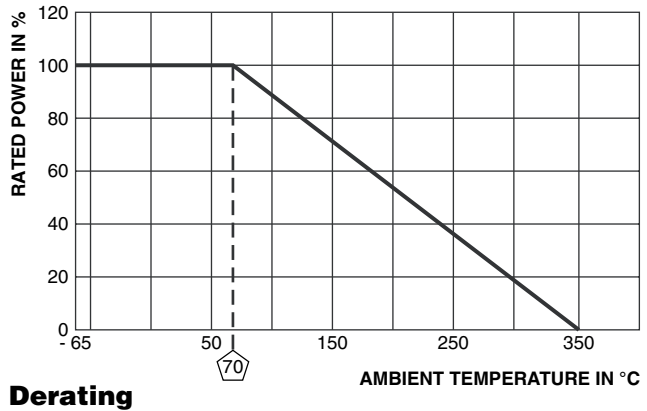
- Direct mounting on printed circuit board
- Circuit board lock-in mounting tabs
- High performance for low cost



RoHS*
COMPLIANT

Please reference the Vishay Dale CPR as an alternative option (for CPR datasheet please visit our website: <http://www.vishay.com/doc?30219>).

STANDARD ELECTRICAL SPECIFICATIONS			
GLOBAL MODEL	POWER RATING $P_{70^\circ\text{C}}$ W	RESISTANCE RANGE Ω	
		$\pm 5\%, \pm 10\%$	
		TCR $\pm 600 \text{ ppm}/^\circ\text{C}$	TCR $\pm 300 \text{ ppm}/^\circ\text{C}$
CPS04	4	R10 - R99	1R0 - 1K0
CPS05	5	R10 - R99	1R0 - 2K0
CPS07	6.5	R10 - R99	1R0 - 2K7



TECHNICAL SPECIFICATIONS		
PARAMETER	UNIT	CPS CHARACTERISTICS
Operating Temperature Range	$^\circ\text{C}$	- 65 to + 350
Short Time Overload	-	5 x rated power for 5 s
Terminal Strength	lb	10 minimum
Maximum Working Voltage	V	$(P \times R)^{1/2}$

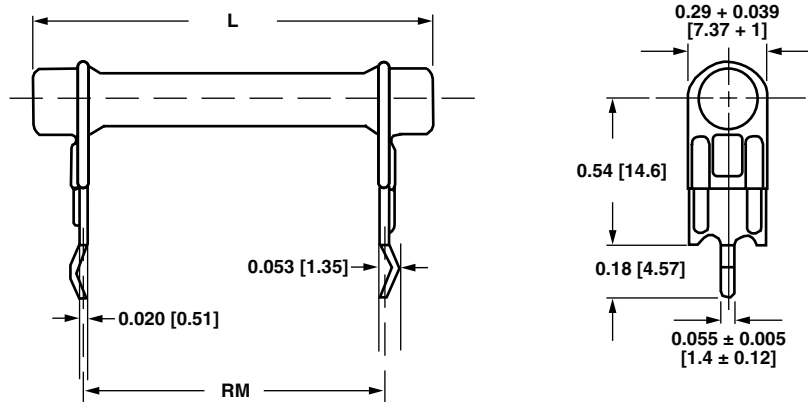
PERFORMANCE		
TEST	CONDITIONS OF TEST	TEST LIMITS
Load Life	1000 h at rated power, 1.5 h "ON", 0.5 h "OFF"	$\pm 3.0\% \Delta R$ average
Climatic Sequence	1000 cycles, - 55 $^\circ\text{C}$ to + 125 $^\circ\text{C}$	$\pm 2.0\% \Delta R$
Damp Heat, Steady State	+ 40 $^\circ\text{C}$, 93 % RH, 56 days	$\pm 2.0\% \Delta R$
Resistance to Solder Heat	+ 260 $^\circ\text{C}$, 10 s	$\pm 0.2\% \Delta R$ typical
Low Temperature Operation	- 65 $^\circ\text{C}$, full rated working voltage for 45 min	$\pm 3.0\% \Delta R$

GLOBAL PART NUMBER INFORMATION																	
Global Part Numbering Example: CPS05P100R0K E14																	
C	P	S	0	5	P	1	0	0	R	0	K	E	1	4			
GLOBAL MODEL	TERMINAL	VALUE	TOLERANCE	PACKAGING	SPECIAL												
CPS04 CPS05 CPS07	P = /2	R = Decimal K = Thousand R1500 = 0.15 Ω 1K000 = 1000 Ω	J = $\pm 5.0\%$ K = $\pm 10.0\%$	E14 = Lead (Pb)-free bulk E31 = Lead (Pb)-free four layer bulk B14 = Tin/lead bulk B31 = Tin/lead four layer bulk	(Dash Number) (up to 3 digits) From 1 - 999 as applicable												

* Pb containing terminations are not RoHS compliant, exemptions may apply

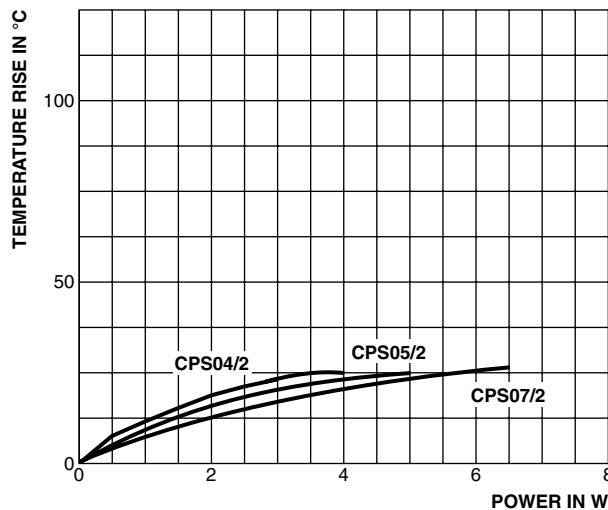
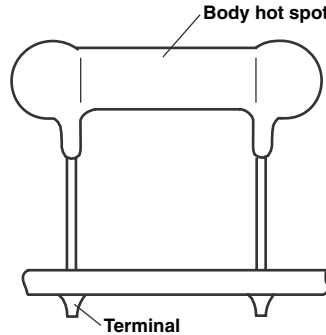


DIMENSIONS in inches [millimeters]

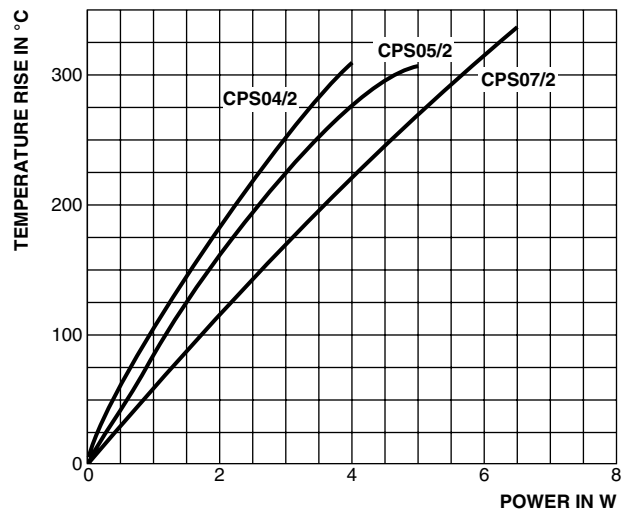


MODEL	DIMENSIONS in inches [millimeters]	
	L	RM
CPS04	0.945 ± 0.055 [24 ± 1.4]	0.598 [15.2]
CPS05	1.350 ± 0.055 [34.3 ± 1.4]	1.000 [25.4]
CPS07	1.752 ± 0.055 [44.5 ± 1.4]	1.398 [35.5]

SURFACE TEMPERATURE



CPS Terminal Temperature



CPS Body Hot Spot Temperature Rise



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