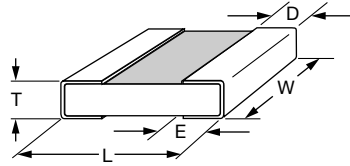


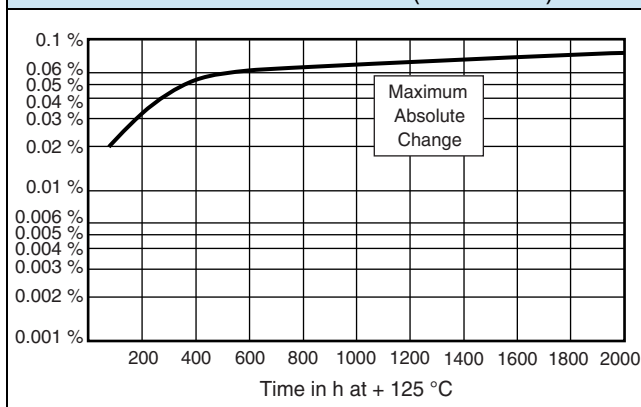
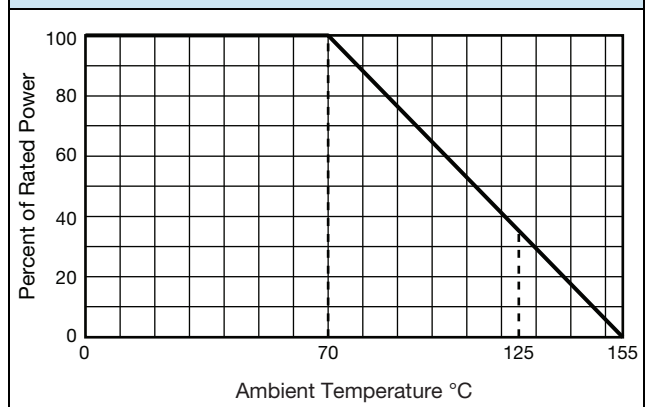
DIMENSIONS in inches


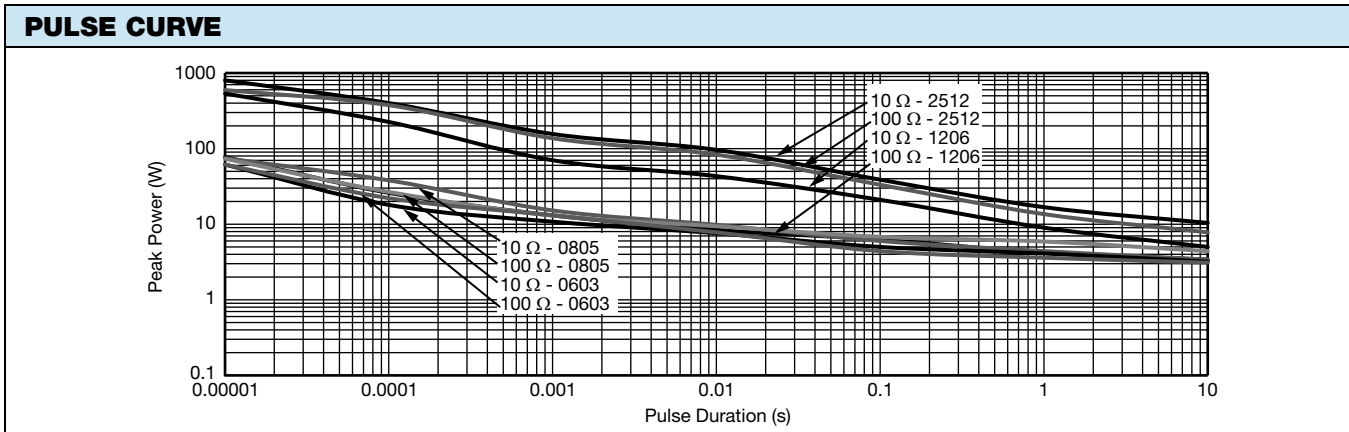
CASE SIZE	L	W	T	D	E
0402	0.042 ± 0.008	0.022 ± 0.005	0.012 to 0.033	0.010 ± 0.005	0.010 ± 0.005
0502	0.055 ± 0.006	0.025 ± 0.005	0.012 to 0.033	0.010 ± 0.005	0.015 ± 0.005
0505	0.055 ± 0.006	0.050 ± 0.005	0.012 to 0.033	0.010 ± 0.005	0.015 ± 0.005
0603	0.064 ± 0.006	0.032 ± 0.005	0.020 max.	0.012 ± 0.005	0.015 ± 0.005
0705, 0805 ⁽¹⁾	0.080 ± 0.006	0.050 ± 0.005	0.015 to 0.033	0.016 ± 0.008	0.015 ± 0.005
1005	0.105 ± 0.007	0.050 ± 0.005	0.015 to 0.033	0.015 ± 0.005	0.015 ± 0.005
1010	0.105 ± 0.007	0.100 ± 0.005	0.015 to 0.033	0.015 ± 0.005	0.015 ± 0.005
1206	0.126 ± 0.008	0.063 ± 0.005	0.015 to 0.033	0.020 ± 0.005 / - 0.010	0.020 ± 0.005 / - 0.010
1505	0.155 ± 0.007	0.050 ± 0.005	0.015 to 0.033	0.015 ± 0.005	0.015 ± 0.005
2010	0.209 ± 0.009	0.098 ± 0.005	0.015 to 0.033	0.020 ± 0.005	0.020 ± 0.005
2208	0.230 ± 0.007	0.075 ± 0.005	0.015 to 0.033	0.020 ± 0.005	0.020 ± 0.005
2512	0.259 ± 0.009	0.124 ± 0.005	0.015 to 0.033	0.020 ± 0.005	0.020 ± 0.005

Note
⁽¹⁾ 0705 and 0805 are the same (only use 0805 when ordering)

ENVIRONMENTAL TESTS (Vishay Performance vs. MIL-PRF-55342 Requirements)

ENVIRONMENTAL TEST	LIMITS MIL-PRF-55342 CHARACTERISTIC "E"	TYPICAL VISHAY PERFORMANCE
Resistance Temperature Characteristic	± 25 ppm/°C	± 15 ppm/°C
Max. Ambient Temp. at Rated Wattage	+70 °C	+70 °C
Max. Ambient Temp. at Power Derating	+150 °C	+150 °C
Thermal Shock ΔR	± 0.1 %	± 0.040 %
Low Temperature Operation ΔR	± 0.1 %	± 0.001 %
Short Time Overload ⁽¹⁾ ΔR	± 0.10 %	± 0.002 %
High Temperature Exposure ΔR	± 0.1 %	± 0.04 %
Resistance to Soldering Heat ΔR	± 0.2 %	± 0.008 %
Moisture Resistance ΔR	± 0.2 %	± 0.004 %
Life +70 °C at 1000 h ΔR	± 0.50 %	± 0.02 %
Insulation Resistance	10 000 Ω minimum	> 100 000 M Ω

Note
⁽¹⁾ 2512 short time overload test is based on 1 W power level below critical value of 20 k Ω
FILM LOAD LIFE STABILITY (at +125 °C)

DERATING CURVE




GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: PTN1206E1002BBT1

P	T	N	1	2	0	6	E	1	0	0	2	B	B	T	1
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GLOBAL MODEL	CASE SIZE	TCR CHARACTERISTIC	RESISTANCE	TOLERANCE	TERMINATION	PACKAGING
PTN	0402 0502 0505 0603 0805 1005 1010 1206 1505 2208 2010 2512	D = ± 15 ppm/°C ⁽¹⁾ E = ± 25 ppm/°C ⁽²⁾ H = ± 50 ppm/°C ⁽²⁾ K = ± 100 ppm/°C L = ± 200 ppm/°C Y = ± 10 ppm/°C ⁽³⁾	The first 3 digits are significant figures and the last digit specifies the number of zeros to follow. "R" designates the decimal point. Example: 10R0 = 10 Ω 1000 = 100 Ω 1001 = 1 kΩ	A = ± 0.05 % ⁽⁴⁾ B = ± 0.1 % D = ± 0.5 % F = ± 1 % G = ± 2 % J = ± 5 %	B = wraparound Sn/Pb solder Sn63 w/nickel barrier G = wraparound Au over Ni (gold) termination epoxy bondable RoHS-compliant - e4 S = wraparound electroplated 100 % pure matte tin RoHS-compliant - e3	BS = BULK 100 min., 1 mult. WO = WAFFLE 100 min., 100 mult. WS = WAFFLE 100 min., 1 mult. WI = 100 min., 1 mult. (item single lot date code) WP = 100 min., 1 mult. (package unit single lot date code) TAPE AND REEL T0 = 100 min., 100 mult. T1 = 1000 min., 1000 mult. ⁽⁵⁾ T3 = 300 min., 300 mult. T5 = 500 min., 500 mult. TF = full reel TS = 100 min., 1 mult. TI = 100 min., 1 mult. (item single lot date code) TP = 100 min., 1 mult. (package unit single lot date code)

Historical Part Number example: PTN0805H8801BBT (for reference purposes only)

PTN	0805	H	8801	B	B	T
STYLE	CASE SIZE	TCR CHARACTERISTIC	OHMIC VALUE	TOLERANCE	TERMINATION	PACKAGING

Notes

- (1) Not available below 50 Ω
- (2) Not available below 10 Ω
- (3) Not available below 100 Ω
- (4) Only available in ≥ 1 kΩ
- (5) Preferred packaging code

RESISTANCE	TCR (ppm/°C)	TOLERANCE (%)
10 Ω to 49.9 Ω	25, 50, 100, 200	0.1, 0.5, 1, 2, 5
50 Ω to 99 Ω	15, 25, 50, 100, 200	0.1, 0.5, 1, 2, 5
100 Ω to 999 Ω	10, 15, 25, 50, 100, 200	0.1, 0.5, 1, 2, 5
1 kΩ to 3 MΩ	10, 15, 25, 50, 100, 200	0.05, 0.1, 0.5, 1, 2, 5
5 Ω to 10 Ω	100, 200	1, 2, 5
1.0 Ω to 5 Ω	200	1, 2, 5



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