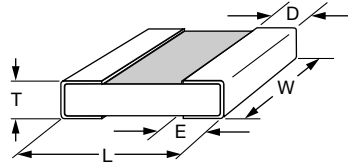


**DIMENSIONS** in inches


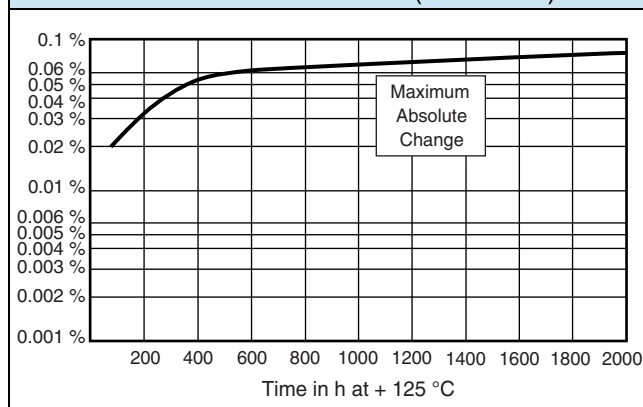
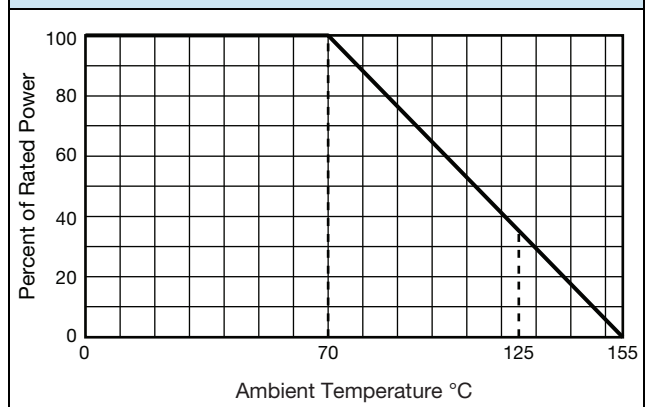
CASE SIZE	L	W	T	D	E
0402	0.042 ± 0.008	0.022 ± 0.005	0.012 to 0.033	0.010 ± 0.005	0.010 ± 0.005
0502	0.055 ± 0.006	0.025 ± 0.005	0.012 to 0.033	0.010 ± 0.005	0.015 ± 0.005
0505	0.055 ± 0.006	0.050 ± 0.005	0.012 to 0.033	0.010 ± 0.005	0.015 ± 0.005
0603	0.064 ± 0.006	0.032 ± 0.005	0.020 max.	0.012 ± 0.005	0.015 ± 0.005
0705, 0805 <sup>(1)</sup>	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

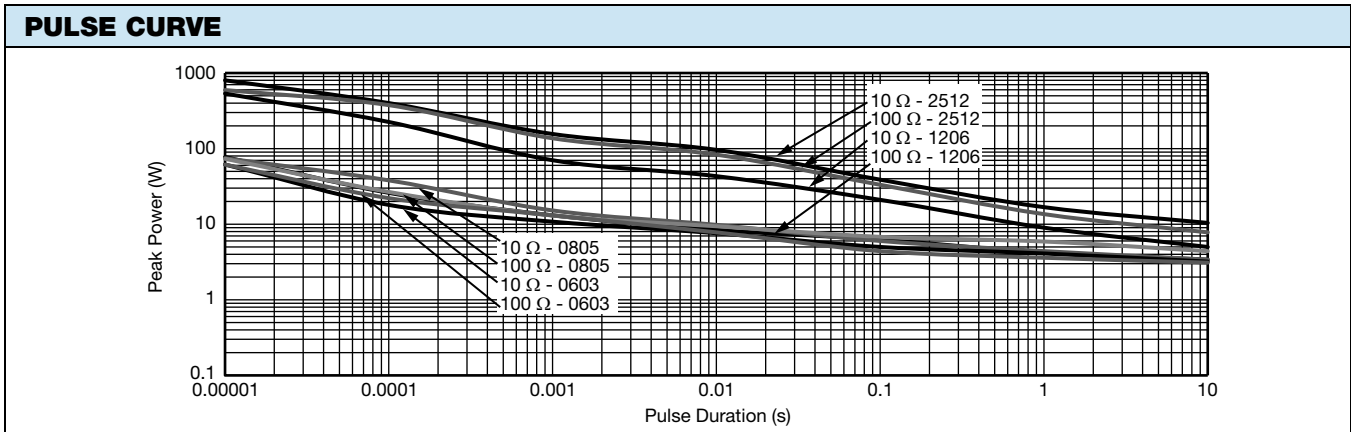
**Note**
<sup>(1)</sup> 0705 and 0805 are the same (only use 0805 when ordering)

**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 $\Delta R$	± 0.1 %	± 0.040 %
Low Temperature Operation $\Delta R$	± 0.1 %	± 0.001 %
Short Time Overload <sup>(1)</sup> $\Delta R$	± 0.10 %	± 0.002 %
High Temperature Exposure $\Delta R$	± 0.1 %	± 0.04 %
Resistance to Soldering Heat $\Delta R$	± 0.2 %	± 0.008 %
Moisture Resistance $\Delta R$	± 0.2 %	± 0.004 %
Life +70 °C at 1000 h $\Delta R$	± 0.50 %	± 0.02 %
Insulation Resistance	10 000 Ω minimum	> 100 000 MΩ

**Note**
<sup>(1)</sup> 2512 short time overload test is based on 1 W power level below critical value of 20 kΩ

**FILM LOAD LIFE STABILITY** (at +125 °C)

**DERATING CURVE**




### GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: **PTN1206E1002BBT1**

<b>P</b>	<b>T</b>	<b>N</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>6</b>	<b>E</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>B</b>	<b>B</b>	<b>T</b>	<b>1</b>
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GLOBAL MODEL	CASE SIZE	TCR CHARACTERISTIC	RESISTANCE	TOLERANCE	TERMINATION	PACKAGING
<b>PTN</b>	<b>0402</b> <b>0502</b> <b>0505</b> <b>0603</b> <b>0805</b> <b>1005</b> <b>1010</b> <b>1206</b> <b>1505</b> <b>2208</b> <b>2010</b> <b>2512</b>	<b>D</b> = ± 15 ppm/°C <sup>(1)</sup> <b>E</b> = ± 25 ppm/°C <sup>(2)</sup> <b>H</b> = ± 50 ppm/°C <sup>(2)</sup> <b>K</b> = ± 100 ppm/°C <b>L</b> = ± 200 ppm/°C <b>Y</b> = ± 10 ppm/°C <sup>(3)</sup>	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	<b>A</b> = ± 0.05 % <sup>(4)</sup> <b>B</b> = ± 0.1 % <b>D</b> = ± 0.5 % <b>F</b> = ± 1 % <b>G</b> = ± 2 % <b>J</b> = ± 5 %	<b>B</b> = wraparound Sn/Pb solder Sn63 w/nickel barrier <b>G</b> = wraparound Au over Ni (gold) termination epoxy bondable RoHS-compliant - e4 <b>S</b> = wraparound electroplated 100 % pure matte tin RoHS-compliant - e3	<b>BS</b> = BULK 100 min., 1 mult. <b>WO</b> = WAFFLE 100 min., 100 mult. <b>WS</b> = WAFFLE 100 min., 1 mult. <b>WI</b> = 100 min., 1 mult. (item single lot date code) <b>WP</b> = 100 min., 1 mult. (package unit single lot date code)  <b>TAPE AND REEL</b> <b>T0</b> = 100 min., 100 mult. <b>T1</b> = 1000 min., 1000 mult. <sup>(5)</sup> <b>T3</b> = 300 min., 300 mult. <b>T5</b> = 500 min., 500 mult. <b>TF</b> = full reel <b>TS</b> = 100 min., 1 mult. <b>TI</b> = 100 min., 1 mult. (item single lot date code) <b>TP</b> = 100 min., 1 mult. (package unit single lot date code)

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

<b>PTN</b>	<b>0805</b>	<b>H</b>	<b>8801</b>	<b>B</b>	<b>B</b>	<b>T</b>
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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