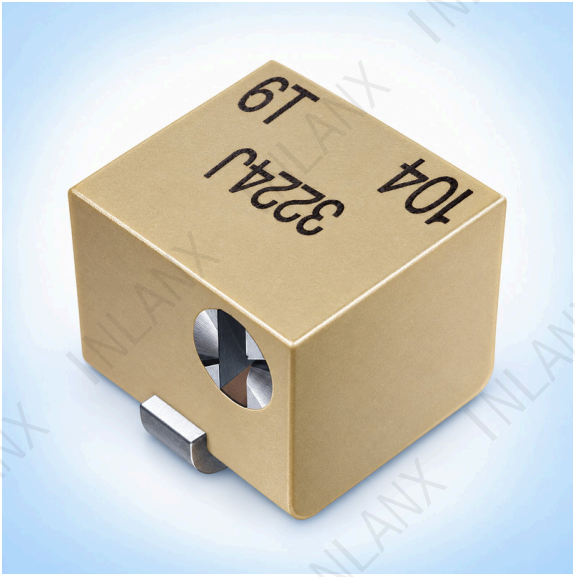
3224 Cermet Trimming Potentiometers

Product features

• 4 mm square SMD multiturn cermet trimmer; sealed industrial construction.

• Flush adjustment supports pick-and-place; J-hook and gull-wing terminals.

Styles: J / G (side adjust); W / X (top adjust)



Electrical characteristics

Parameter	3224
Resistance range	10 Ω-2 MΩ
Resistance tolerance	±10%
Minimum / end resistance	1% or 2 Ω, whichever is greater
Contact resistance variation	1% or 3 Ω max., whichever is greater
Resolution	Essentially infinite
Insulation resistance	≥100 MΩ at 500 VDC
Dielectric strength	600 VAC, 1 minute at sea level
Electrical travel	11 turns nominal

Environmental characteristics

Parameter	3224
Rated power / voltage limit	0.25 W at 85°C; 0 W at 150°C; max. 300 V
Operating temperature	-65°C to +150°C
Temperature coefficient	±100 ppm/°C
Humidity	MIL-STD-202 Method 106; TRS ±2%; IR 10 MΩ
Vibration	20 G; TRS ±1%; VRS ±1%
Shock	100 G; TRS ±1%; VRS ±1%
Load life	1000 h at 85°C rated power; TRS 3 Ω or 3%, whichever is greater
Rotational life	200 cycles; TRS 3 Ω or 3%, whichever is greater
Thermal shock	5 cycles; TRS ±2%; VRS ±1%

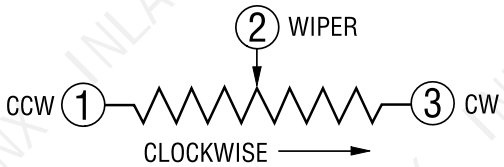
3224 Cermet Trimming Potentiometers

Physical characteristics

Parameter	3224
Torque	180 g-cm max.
Stop / end-stop strength	Wiper idles
Terminals	Surface-mount terminals
Weight	Approx. 0.01 oz
Wiper setting	50% of actual TR, ±10%
Flammability	UL 94V-0
Pushover strength	J / G: 4.4 lb; W / X: 2.2 lb
Solderability	MIL-STD-202 Method 208
Adjustment tool	H-91

TR: total resistance; CRV: contact resistance variation; VR: voltage ratio. TRS/VRS indicate shifts in total resistance/voltage ratio. —: not specified for that construction.

Terminal circuit



Standard resistance values and codes

3224

Resistance	Code	Resistance	Code	Resistance	Code
10 Ω	100	20 Ω	200	50 Ω	500
100 Ω	101	200 Ω	201	500 Ω	501
1 kΩ	102	2 kΩ	202	5 kΩ	502
10 kΩ	103	20 kΩ	203	25 kΩ	253
50 kΩ	503	100 kΩ	104	200 kΩ	204
250 kΩ	254	500 kΩ	504	1 MΩ	105
2 MΩ	205				

Selected drawing dimensions • mm

Style	Shown outline values	Lead / pad spacing	Other drawing values
J	5.0; 4.8; 3.7	2.0	—
G	6.0; 4.8; 3.91	2.0; 1.27	—
W	5.2; 4.8; 3.9	2.0; 2.54	—
X	5.3; 4.8; 5.7	2.54	—

Drawing reference values only; use the individual outline views. Units: mm (inches in parentheses). Individual tolerances apply.

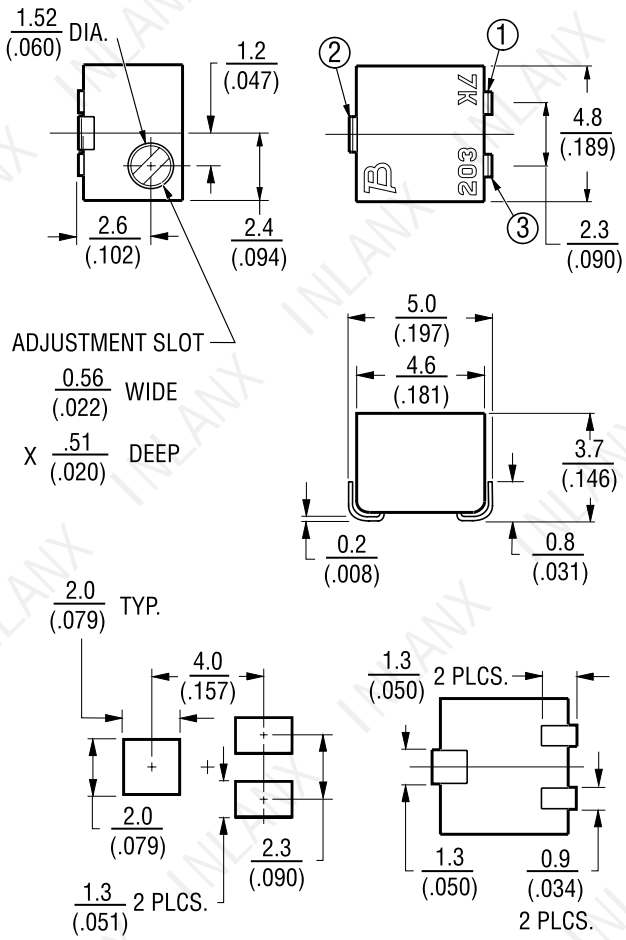
3224 Cermet Trimming Potentiometers

Outline and mounting dimensions

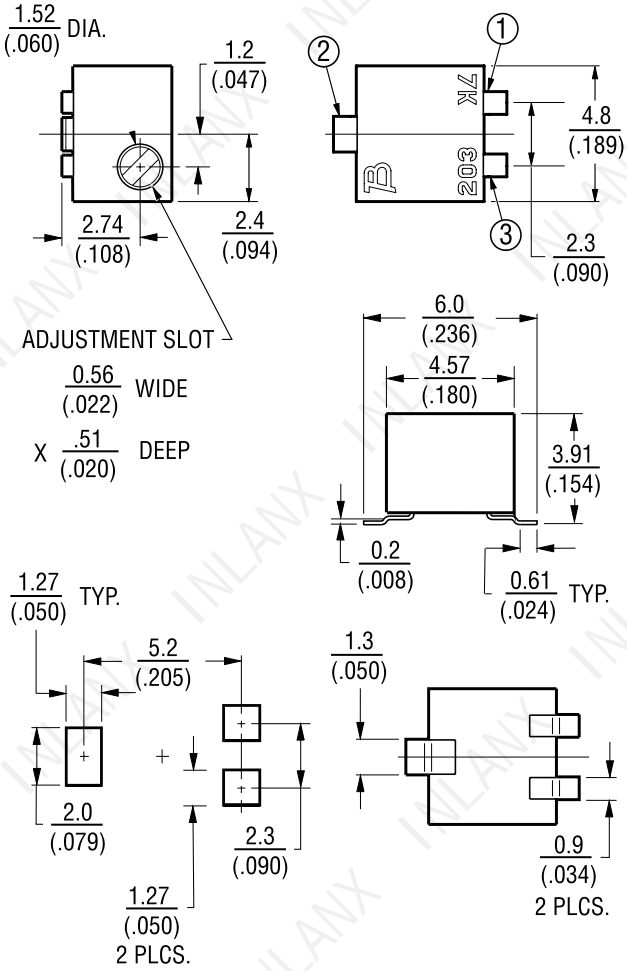
Unless otherwise noted: ±0.25 mm (±0.010 in).

J / G side adjustment and pads

3224J Side Adjust



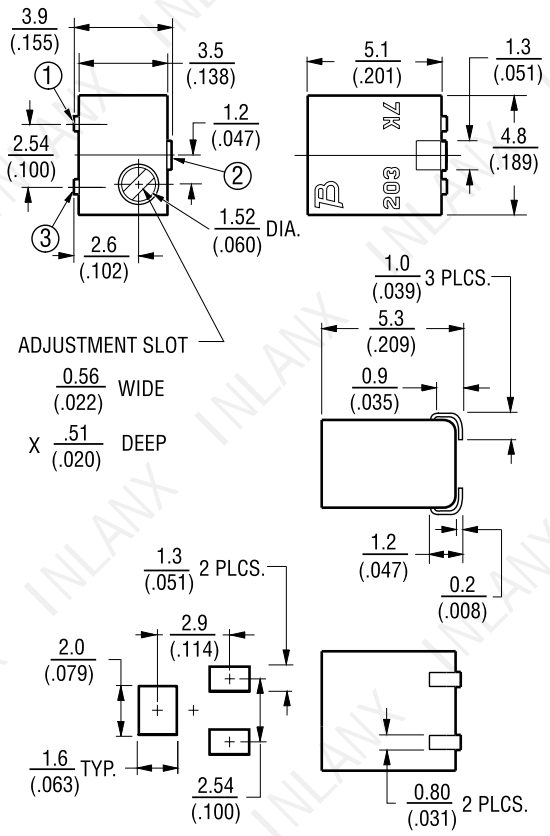
3224G Side Adjust



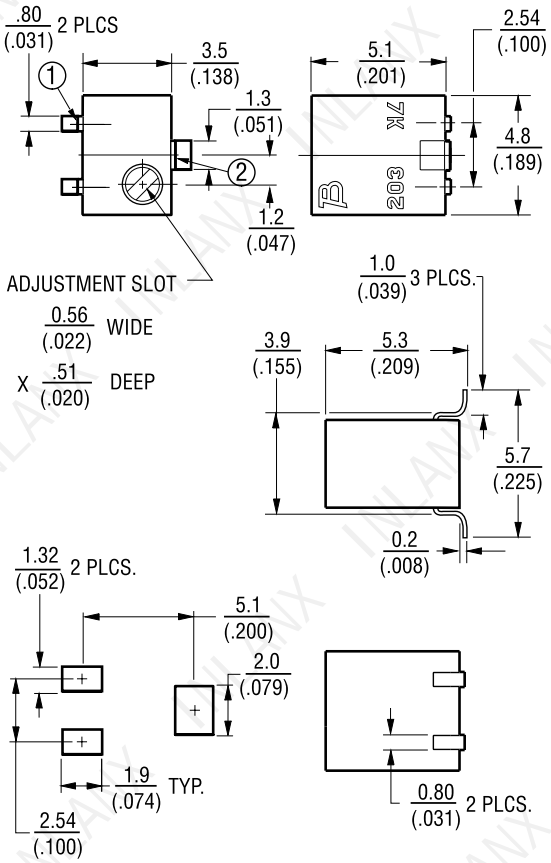
3224 Cermet Trimming Potentiometers

W / X top adjustment and pads

3224W Top Adjust



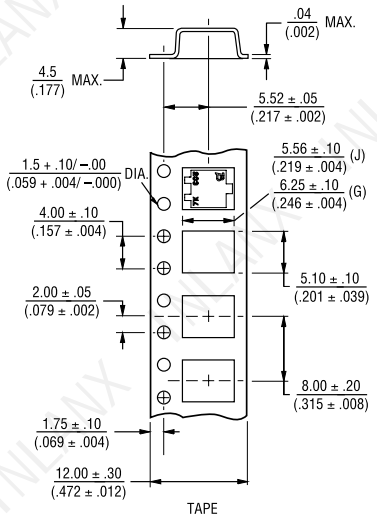
3224X Top Adjust



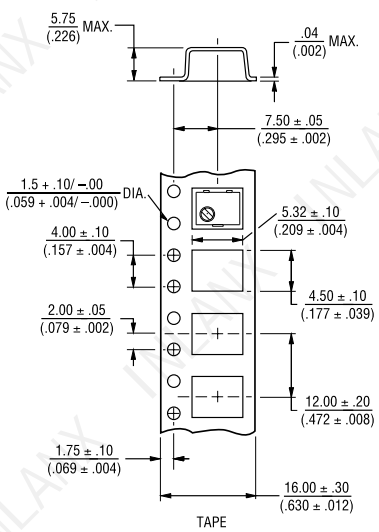
Packaging dimensions

J / G / W / X embossed tape

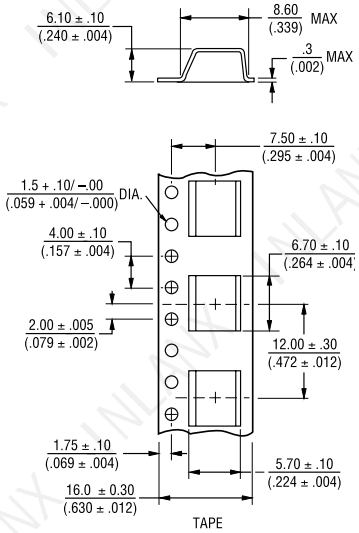
J & G Styles



W Style

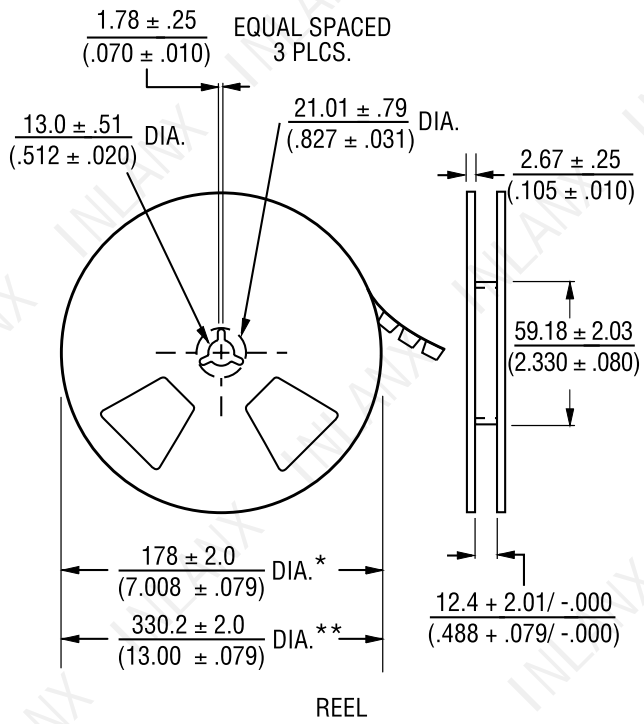


X Style



3224 Cermet Trimming Potentiometers

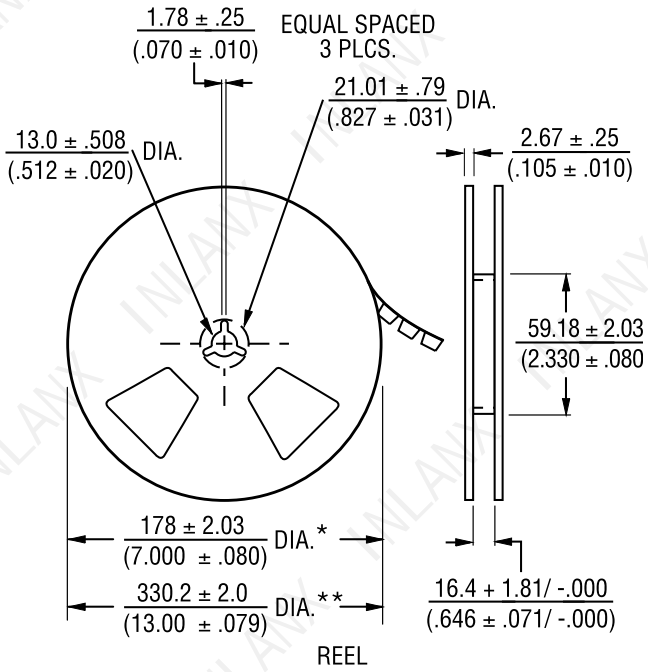
J / G / W / X reels



* Embossed Tape Designator "E"
**Embossed Tape Designator "G"
(See How To Order chart for further information.)

Cover tape peel strength: Meets EIA specification 481.

W & X Style Reel



* Embossed Tape Designator "E"
**Embossed Tape Designator "G"
(See How To Order chart for further information.)

Cover tape peel strength: Meets EIA specification 481.

Packaging and ordering

7-inch E reel: J/G 500 pcs, W 250 pcs, X 200 pcs. 13-inch G reel: J/G 1500 pcs, W 1000 pcs, X 850 pcs. FW5 13-inch: J/G 1500 pcs, W/X 600 pcs.

INLANX - 3224 - Style - Product indicator - Resistance code - Reel code. Example: 3224 J - 1 - 502 E. -1: IR reflow; -2: wave solderable with treated stainless-steel shaft; FW5: 0.070 ±0.010 inch shaft extension.