COMMON MODE CHOKE CATALOG
Suited for LAN and Telecom Applications

Pulse
A TECHNITROL COMPANY

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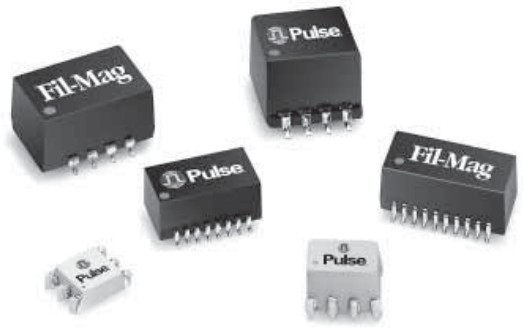
Common Mode Chokes for Datacom Applications

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SURFACE MOUNT COMMON MODE CHOKES

Suited for LAN and Telecom Applications



- Reduces radiated EMI emissions
- Filters common mode noise for EMI reduction
- Common mode attenuation from 100 kHz to 1 GHz
- Tape & Reel packaging available for surface mount parts*

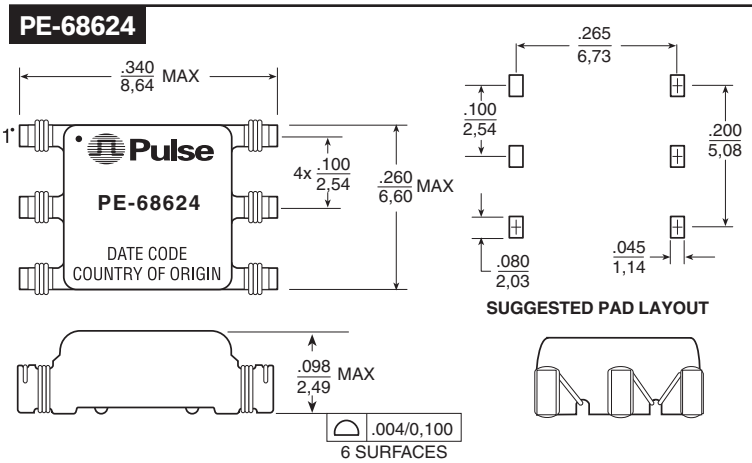
Electrical Specifications @ 25°C

Part Number	No. of Ports	Primary Inductance OCL (µH MIN)	Common Mode Attenuation (db TYP)									DCR (Ω MAX)	Page Number Mech & Schem
			100 KHz	1 MHz	10 MHz	30 MHz	50 MHz	100 MHz	300 MHz	500 MHz	1 GHz		
PE-68624	2	47	11	27	40	44	42	36	26	17	—	0.40	2
PE-65855	2	4700	41	43	49	39	34	26	20	20	12	1.0	4
B2013	2	6300	46	47	43	32	25	29	21	14	16	1.0	3
B4003	2	4700	42	41	48	38	33	21	22	23	17	1.0	6
23Z87SM	3	69	9	24	31	30	29	27	21	16	—	0.20	4
PE-65857	4	22.5	7	20	30	37	38	34	24	13	—	0.22	4
PE-68627	4	24	8	21	32	36	37	36	30	20	—	0.25	4
T8003	4	33	9	13	32	32	30	27	16	17	13	0.20	6
23Z4000SMD	4	36	7	23	35	38	38	36	29	24	—	0.50	5
PE-65854	4	47	3	19	32	36	35	29	12	6	—	0.40	3
23Z104SM	4	68	8	22	28	28	27	25	20	15	—	0.20	5
PE-67540	4	100	14	33	44	48	49	44	34	29	20	0.60	4
PE-65853	4	4700	40	51	38	30	25	20	14	13	—	1.20	3
23Z106SM	6	68	8	22	29	30	30	29	24	19	—	0.20	5
PE-69011	8	36	8	24	36	39	35	29	18	11	—	0.35	3
23Z105SM	8	68	8	24	30	29	27	24	16	11	—	0.20	5
23Z109SM	10	7.5	4	9	20	25	26	24	16	11	—	0.20	5
T8008	16	47	7	27	40	44	42	36	26	—	—	0.40	6

***** When ordering Tape & Reel packaging, add a "**T**" at the end of the part number (i.e. PE-65738**T** or 23Z106SM**T**).
NOTE: Additional common mode chokes are available. Please contact Applications Engineering.

Mechanical

PE-68624



Weight . . . . . 0.17 grams
Tape & Reel 1500/reel
Tube 85/tube

Schematic

PE-68624



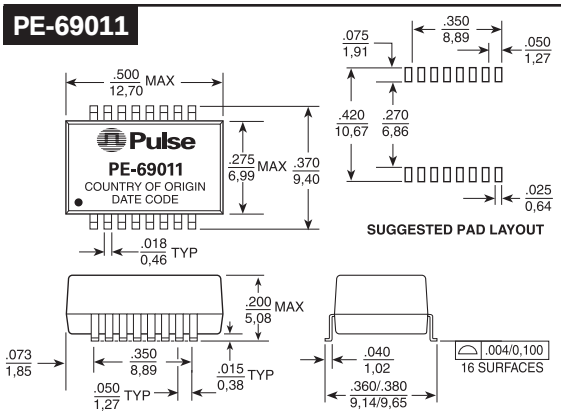
SURFACE MOUNT COMMON MODE CHOKES

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Mechanical | Schematic

PE-69011

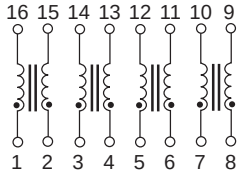


Dimensions: Inches / mm

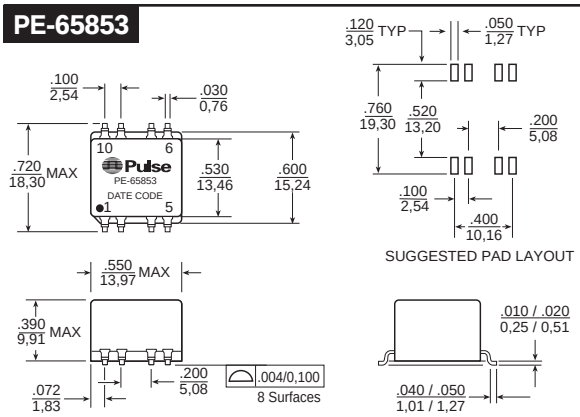
Unless otherwise specified, all tolerances are ± .010 / 0,25

Weight . . . . . 0.83 grams
Tape & Reel 900/reel
Tube 40/tube

PE-69011



PE-65853

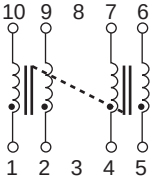


Dimensions: Inches / mm

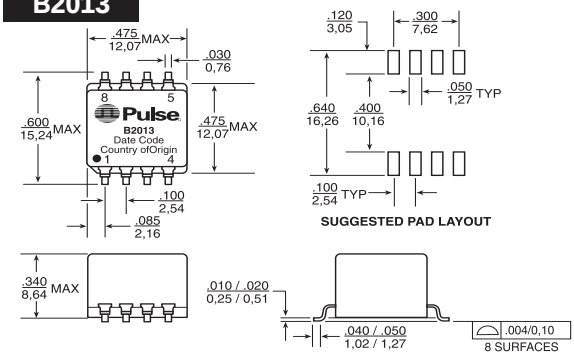
Unless otherwise specified, all tolerances are ± .010 / 0,25

Weight . . . . . 4.0 grams
Tape & Reel 150/reel
Tube 35/tube

PE-65853



B2013



Dimensions: Inches / mm

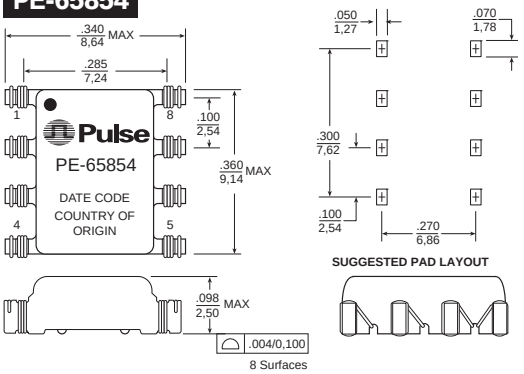
Unless otherwise specified, all tolerances are ± .010 / 0,25

Weight . . . . . 9.5 grams
Tray 30/tray

B2013



PE-65854

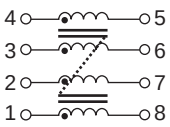


Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .010 / 0,25

Weight . . . . . 0.3 grams
Tape & Reel 1500/reel
Tube 60/tube

PE-65854

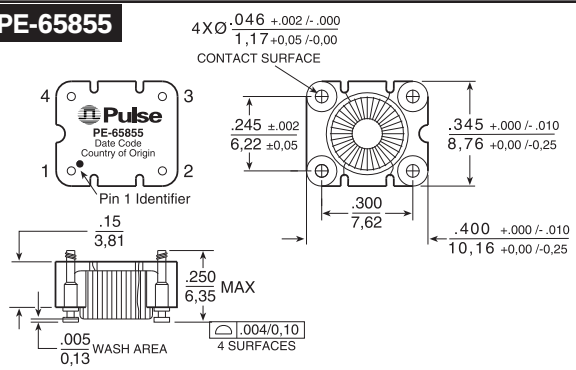


SURFACE MOUNT COMMON MODE CHOKES

Suited for LAN and Telecom Applications

Mechanical Schematic

PE-65855



Dimensions: Inches / mm

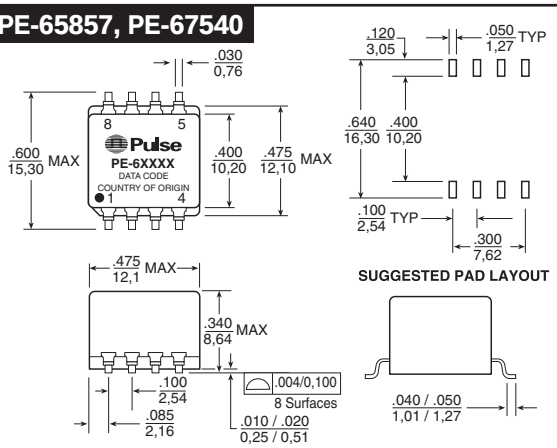
Unless otherwise specified, all tolerances are ± .010 / 0,25

Weight . . . . . **0.69** grams
Tape & Reel **800/reel**
Tube . . . . . **40** /tube

PE-65855



PE-65857, PE-67540

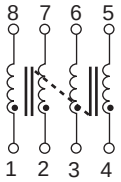


Dimensions: Inches / mm

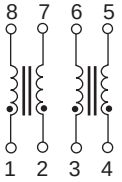
Unless otherwise specified, all tolerances are ± .010 / 0,25

Weight . . . . . 2.0 grams
Tape & Reel 250/reel
Tube 40/tube

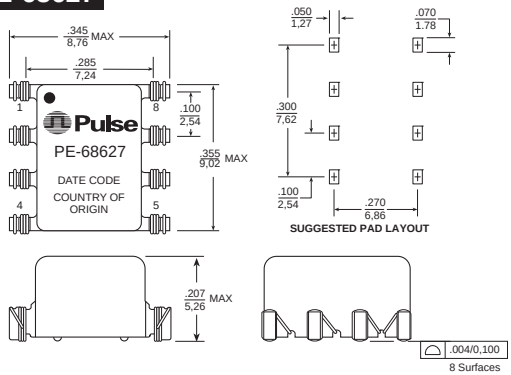
PE-65857



PE-67540



PE-68627

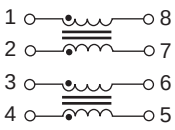


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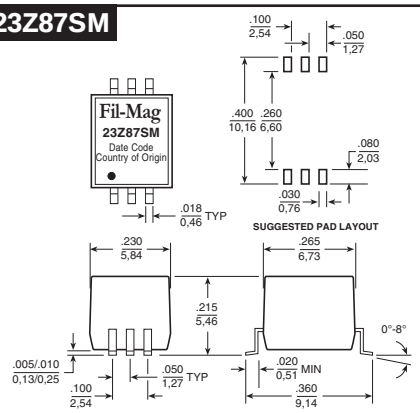
Unless otherwise specified, all tolerances are ± .010 / 0,25

Weight . . . . . 0.3 grams
Tape & Reel 1500/reel
Tube 55/tube

PE-68627



23Z87SM



Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .005 / 0,13

Weight . . . . . 0.5 grams
Tape & Reel 750/reel
Tube 100/tube

23Z87SM



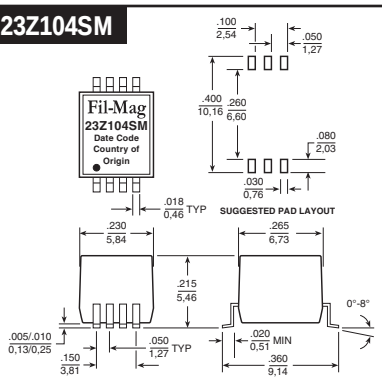
SURFACE MOUNT COMMON MODE CHOKES

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Mechanical | Schematic

23Z104SM

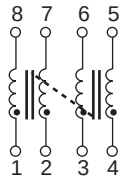


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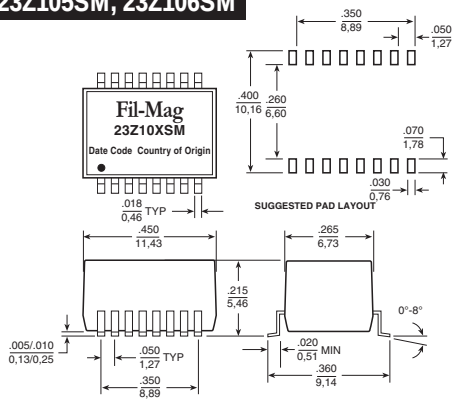
Unless otherwise specified, all tolerances are ± .005 / 0,13

Weight . . . . . 0.5 grams
Tape & Reel 750/reel
Tube 100/tube

23Z104SM



23Z105SM, 23Z106SM

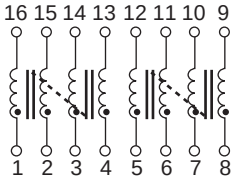


Dimensions: Inches / mm

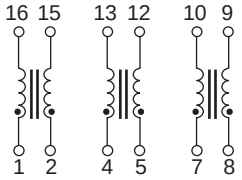
Unless otherwise specified, all tolerances are ± .005 / 0,13

	23Z105SM	23Z106SM
Weight	0.8 grams	1.0 grams
Tape & Reel	750/reel	750/reel
Tube	50/tube	50/tube

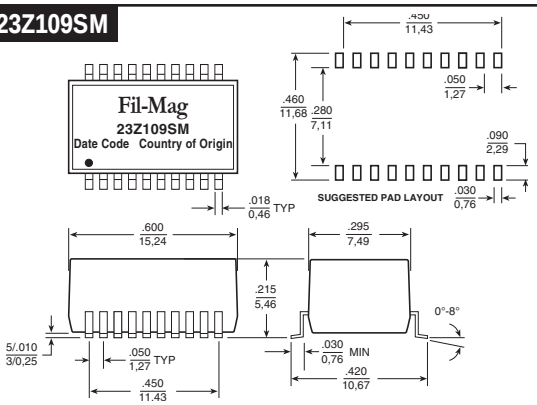
23Z105SM



23Z106SM



23Z109SM

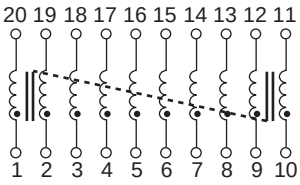


Dimensions: Inches / mm

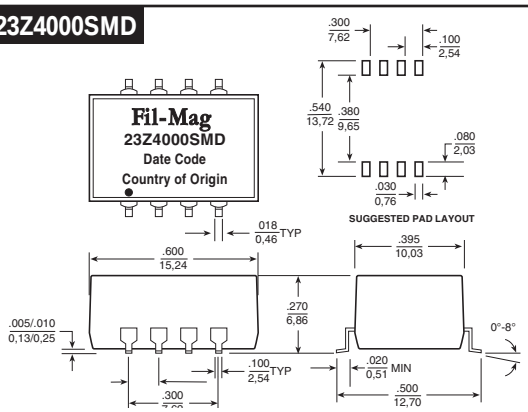
Unless otherwise specified, all tolerances are ± .005 / 0,13

Weight . . . . . 1.3 grams
Tape & Reel 500/reel
Tube 38/tube

23Z109SM



23Z4000SMD

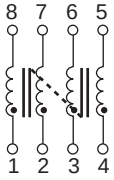


Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .005 / 0,13

Weight . . . . . 2.1 grams
Tape & Reel 350/reel
Tube 38/tube

23Z4000SMD

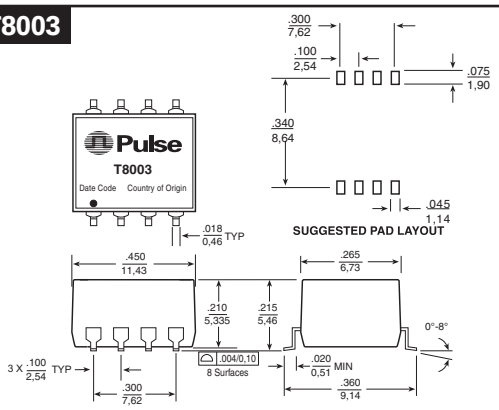


SURFACE MOUNT COMMON MODE CHOKES

Suited for LAN and Telecom Applications

Mechanical | Schematic

T8003

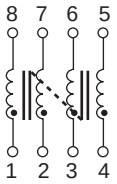


Dimensions: Inches / mm

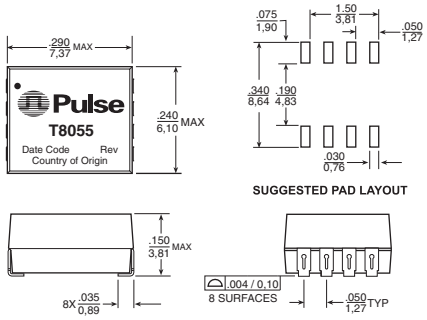
Unless otherwise specified, all tolerances are ± .005 / 0,13

Weight . . . . . 0.84 grams
Tape & Reel 750/reel
Tube 100/tube

T8003



T8055

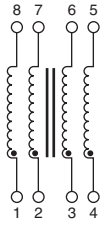


Dimensions: Inches / mm

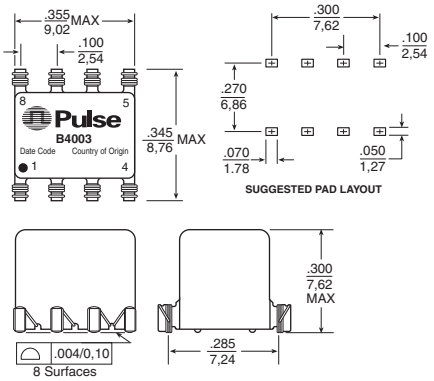
Unless otherwise specified, all tolerances are ± .010 / 0,25

Weight . . . . . 0.2 grams
Tape & Reel 1750/reel
Tube 80/tube

T8055



B4003

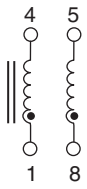


Dimensions: Inches / mm

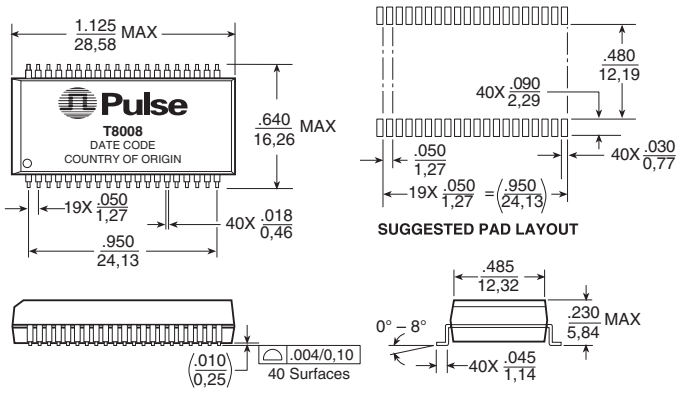
Unless otherwise specified, all tolerances are ± .010 / 0,25

Weight . . . . . 1.0 grams
Tape & Reel 425/reel
Tube 50/tube

B4003



T8008

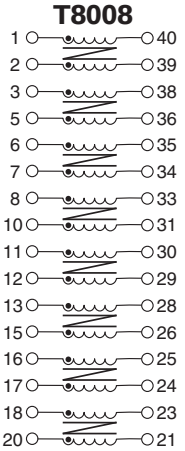


Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .010 / 0,25

Weight . . . . . 4.0 grams
Tape & Reel 250/reel
Tube 15/tube

T8008

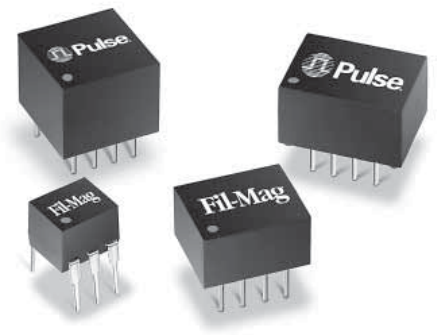


NOTE: The common mode test circuit for surface mount is the same as for through hole and is on the back page.

THROUGH HOLE COMMON MODE CHOKES

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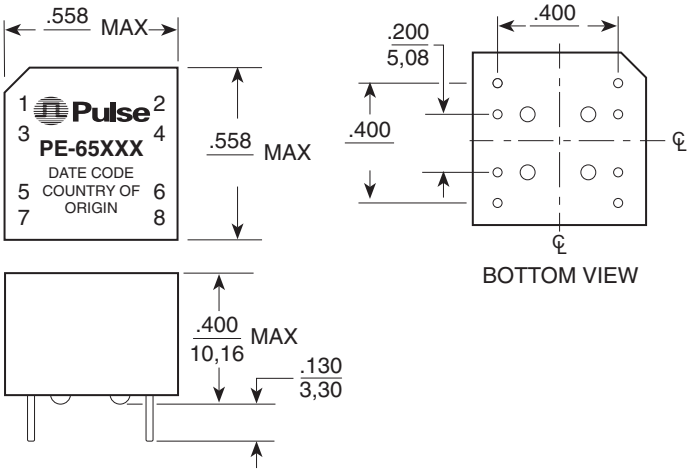
- Reduces radiated EMI emissions
- Filters common mode noise for EMI reduction
- Common mode attenuation from 100 kHz to 1 GHz
- Tube packaging available for through hole parts

Electrical Specifications @ 25°C

Part Number	No. of Lines	Primary Inductance OCL (µH MIN)	Common Mode Attenuation (dB TYP)									DCR (Ω MAX)	Page Number Mech & Schem
			100 kHz	1 MHz	10 MHz	30 MHz	50 MHz	100 MHz	300 MHz	500 MHz	1 GHz		
PE-65944	2	24	1	14	28	32	33	28	13	5	—	0.30	8
PE-67531	2	140	14	34	45	49	50	47	38	32	25	0.60	9
B2005	2	9000	47	47	41	30	22	33	21	15	15	1.0	10
PE-65554	4	24	—	21	32	38	39	34	24	13	—	0.30	8
PE-68002	4	68	7	24	37	41	42	40	31	27	—	0.35	9
23Z104	4	85	8	23	29	29	28	25	17	11	—	0.20	10
PE-67539	4	140	14	33	44	48	48	43	33	28	19	0.60	9
PE-65542	4	1000	28	41	42	32	22	—	—	—	—	0.70	8
PT5039	4	3600	42	43	42	32	27	17	15	9	13	0.50	8
J0010D11	4	—	9	13	32	35	35	29	13	24	19	0.50	10
PE-65950	4	4700±30%	40	51	37	28	23	20	—	—	—	1.00	8
PE-65541	4	6000	44	54	33	32	29	—	—	—	—	1.40	8
PE-68613	4	3290	40	51	37	28	23	20	—	—	—	1.00	10

Mechanical

PE-65541, PE-65542, PE-65950

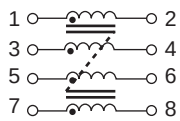


Dimensions: Inches / mm
Unless otherwise specified, all tolerances are ± .010 / 0,25

Weight . . . . . 0.38 grams
Tube 35/tube

Schematic

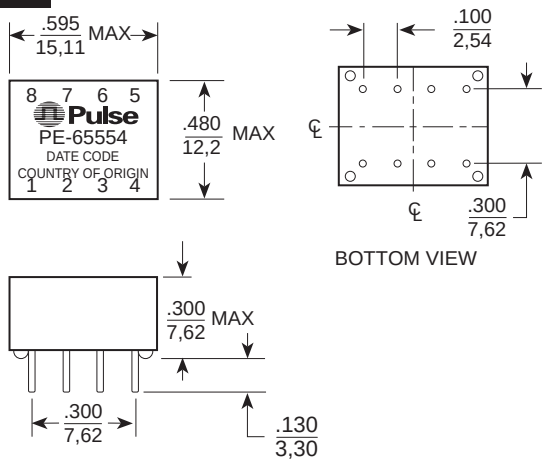
PE-65541
PE-65542
PE-65950



THROUGH HOLE
COMMON MODE CHOKES
Suited for LAN and Telecom Applications

Mechanical | Schematic

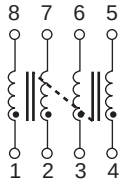
PE-65554



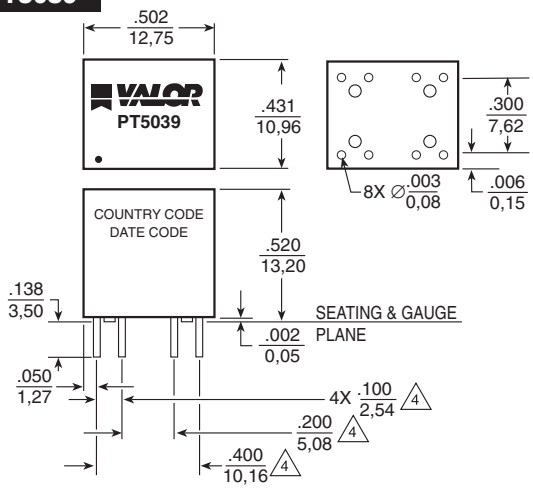
Dimensions: Inches / mm
Unless otherwise specified, all tolerances are ± .010 / 0,25

Weight . . . . . 2.5 grams
Tube 35/tube

PE-65554



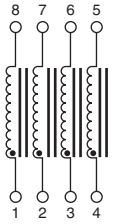
PT5039



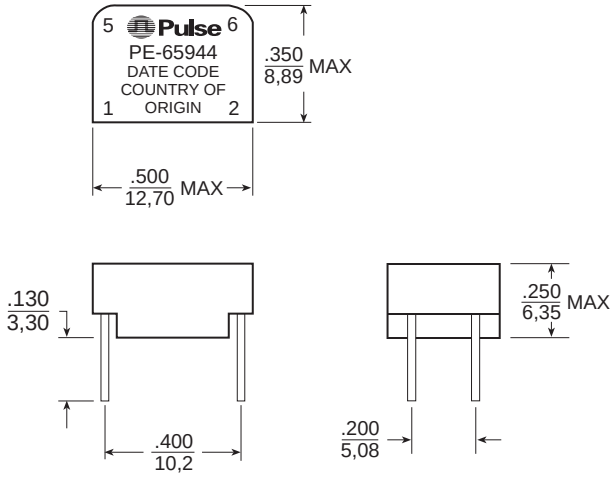
Dimensions: Inches / mm
Unless otherwise specified, all tolerances are ± .010 / 0,25

Weight . . . . . 2.5 grams
Tube 35/tube

PT5039



PE-65944



Dimensions: Inches / mm
Unless otherwise specified, all tolerances are ± .010 / 0,25

Weight . . . . . 1.07 grams
Tube 30/tube

PE-65944

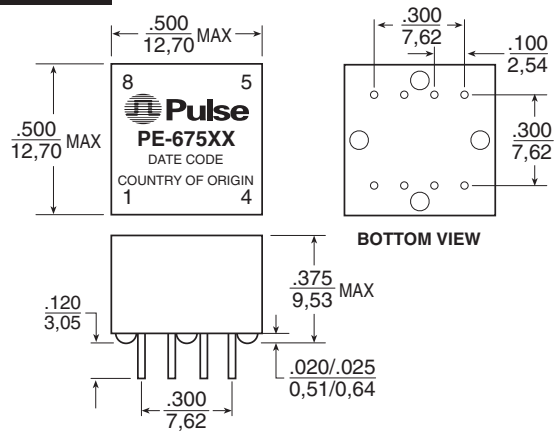


THROUGH HOLE
COMMON MODE CHOKES
Suited for LAN and Telecom Applications

Pulse
A TECHNITROL COMPANY

Mechanical | Schematic

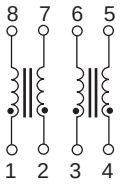
PE-67539



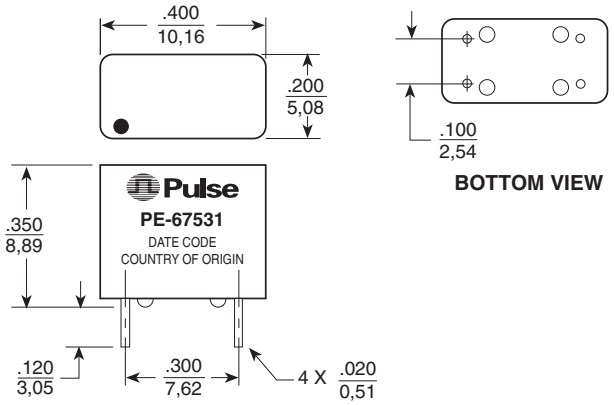
Dimensions: Inches / mm
Unless otherwise specified, all tolerances are ± .010 / 0,25

Weight . . . . . 2.4 grams
Tube 40/tube

PE-67539



PE-67531



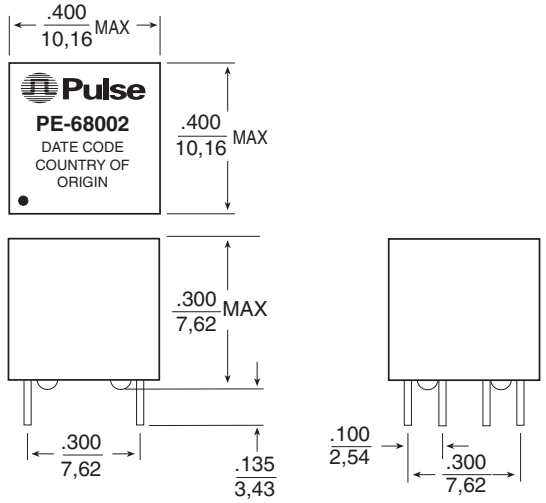
Dimensions: Inches / mm
Unless otherwise specified, all tolerances are ± .010 / 0,25

Weight . . . . . 0.76 grams
Tube 40/tube

PE-67531



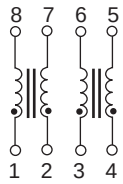
PE-68002



Dimensions: Inches / mm
Unless otherwise specified, all tolerances are ± .010 / 0,25

Weight . . . . . 1.4 grams
Tube 50/tube

PE-68002



THROUGH HOLE COMMON MODE CHOKES

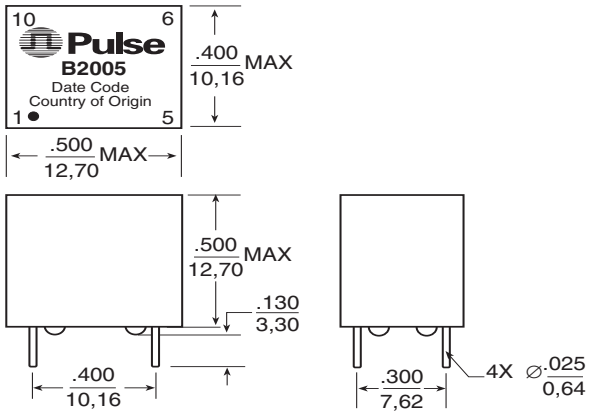
Suited for LAN and Telecom Applications

Pulse A TECHNITROL COMPANY

Mechanical

Schematic

B2005



Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .005 / 0,13

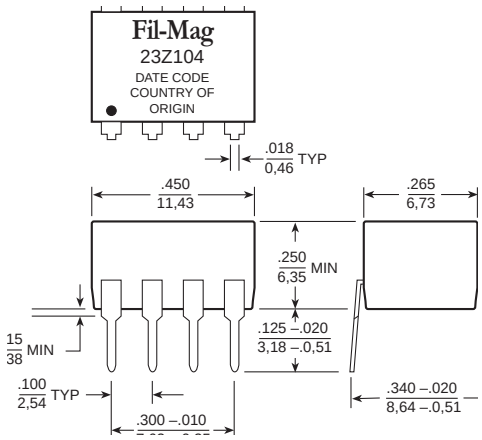
Weight . . . . . 3.7 grams

Tube 40/tube

B2005



23Z104



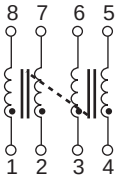
Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .005 / 0,13

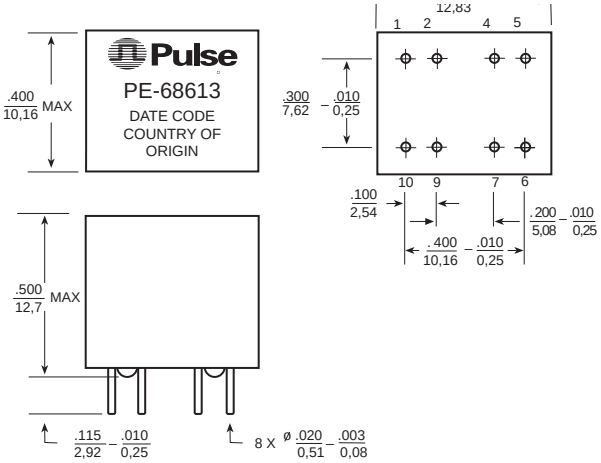
Weight . . . . . 1.0 grams

Tube 50/tube

23Z104



PE-68613



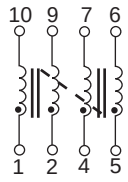
Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .005 / 0,127

Weight . . . . . 3.5 grams

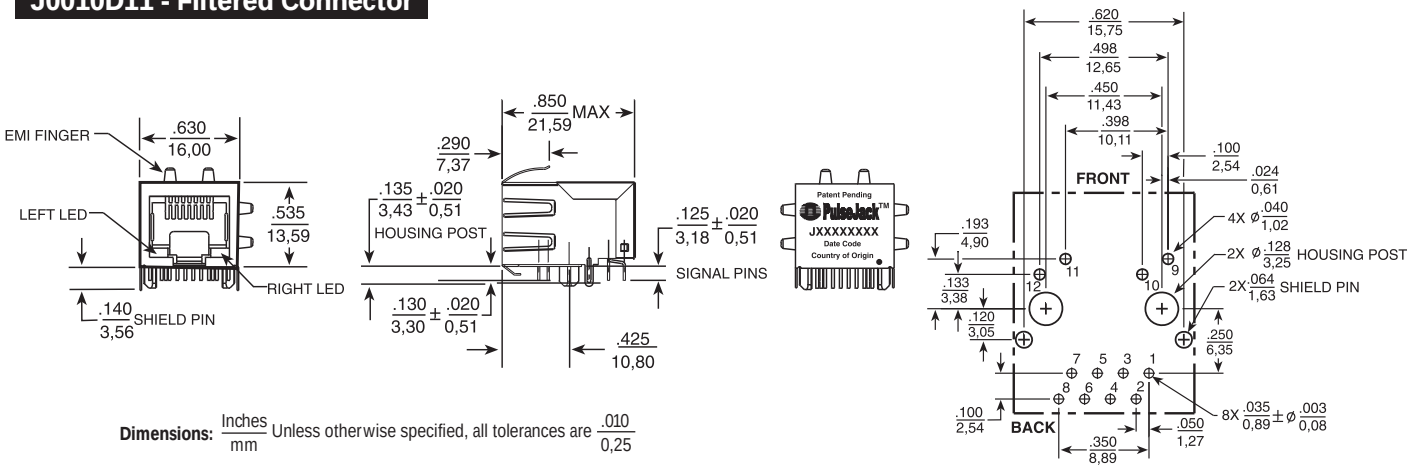
Tube 40/tube

PE-68613



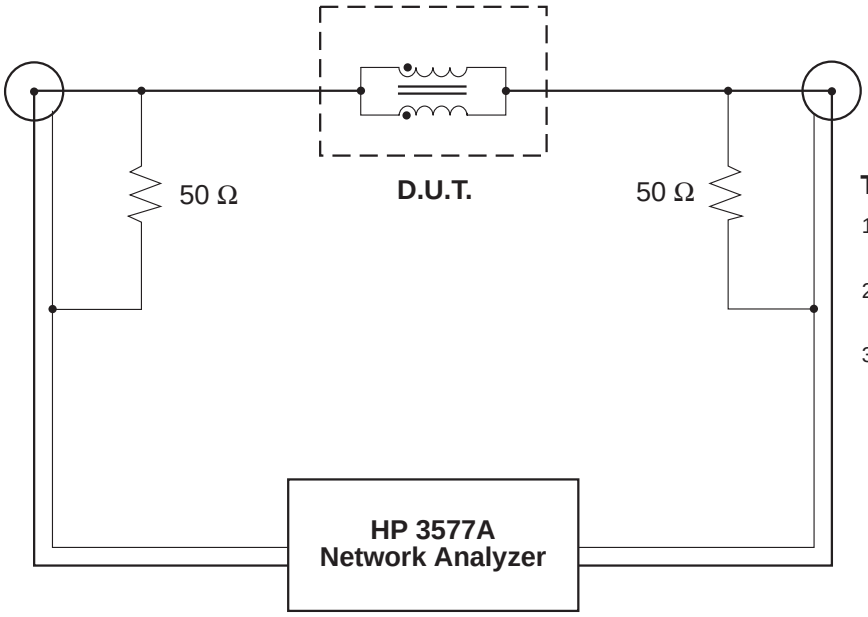
THROUGH HOLE COMMON MODE CHOKES
Suited for LAN and Telecom Applications

J0010D11 - Filtered Connector



Dimensions: Inches / mm Unless otherwise specified, all tolerances are .010 / 0,25

Common Mode Test Circuit for Surface Mount and Through Hole



Test Notes:

1. Network analyzer calibrated to compensate for 50 Ω resistors.
2. All windings on a core are connected in parallel for the test.
3. For multi-core chokes, test data is for one core only. The windings on the other core(s) are left unconnected (i.e. open).

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