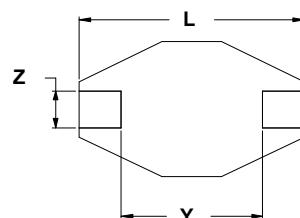
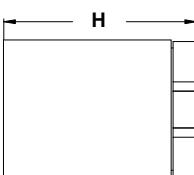
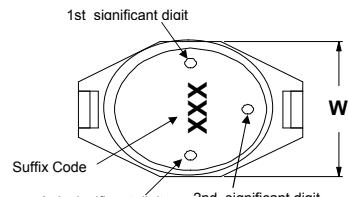
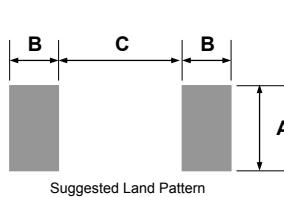


SERIES:	coev MAGNETICS	<small>tyco</small> Electronics	3003 9th Avenue SW PO Box 50 Watertown, SD 57201 Toll free: 888-978-2638 Ph: 605-886-3326 Fax: 605-886-8995	
MGDS5			Shielded, Low Profile, High Current Power Inductors	



Parts will be marked with Significant Digit Dots OR Suffix code

Series Number	Maximum Dimensions			Reference Dimensions					
	Units	L	W	H	Y	Z	A	B	C
MGDS5	inches	0.730"	0.600"	0.300"	0.500"	0.100"	0.110"	0.115"	0.490"
	[mm]	[18.54]	[15.25]	[7.62]	[12.70]	[2.54]	[2.79]	[2.92]	[12.45]

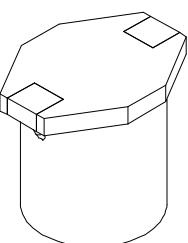
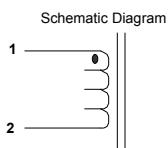
Features:

- High energy storage and low resistance
- Reliable surface mounting, flat top for pick and place.
- Smaller real estate than other common inductors.
- Robust temperature deflection to prevent damage during solder reflow.
- Tape and Reel mechanical specifications available upon request.
- Operating Temperature -40°C to $+85^{\circ}\text{C}$.



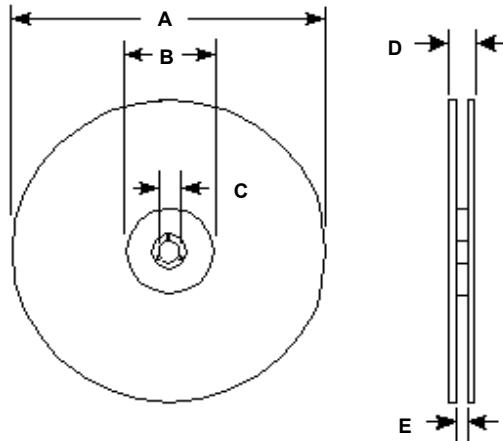
Terminal Plating is Gold Flash over Ni
260°C Maximum reflow temperature per J-STD-020

Contact CoEy for additional inductance values



Specifications subject to change

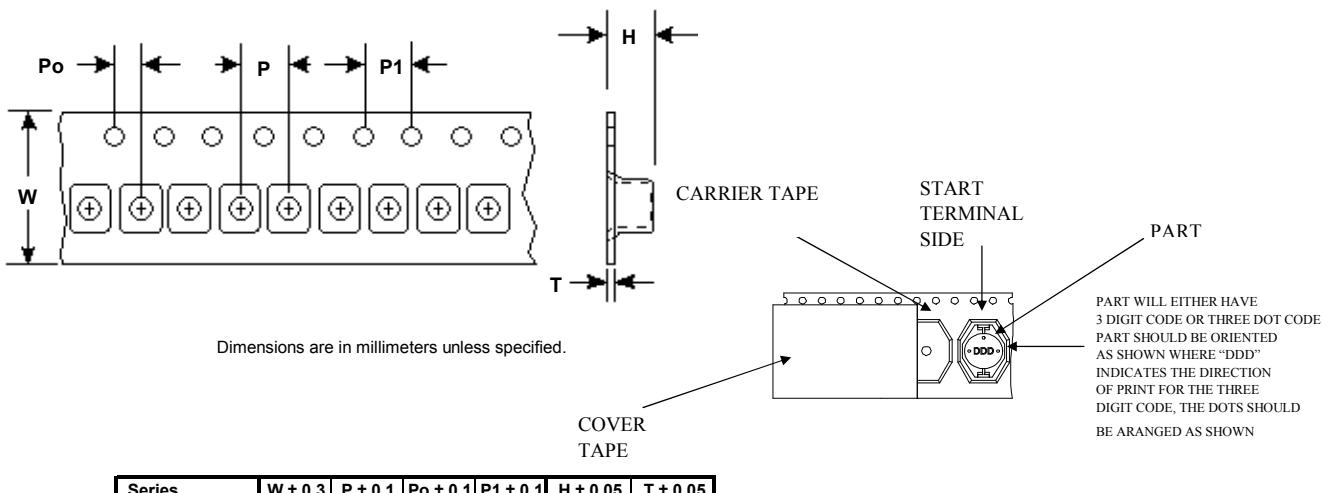
Call Toll Free: 888-978-2638 Website: www.tycopowercomponents.com



Dimensions are in millimeters unless specified.

Series Number	Reel dimensions					Reel Qty	Carton (Box0 Qty.)	Packaging Specification	
	Units	A MAX	B MIN	C ± 0.5	D MAX				
MGDS5	in.	14.17"	3.94"	0.51"	1.98"	1.87"	250	1000	90-0065
	[mm]	[360]	[100.0]	[13.0]	[50.40]	[47.40]			

PACKAGING NOTE: Only pressure sensitive cover tape is to be used.



Customer Packaging Specifications For Print Distribution to Customers

Series	Revision
MGDS5	B0
Sheet 2 of 7	

Item	Specification	Test Method/Condition						
Environmental								
Static Humidity	After exposure part remains within specified electrical parameters for L, Q and DCR.	Expose parts to an environment of +50°C with 90 to 95% R.H. for 100 hours. After exposure, allow parts to dry for 2 hours before measurements are taken.						
Storage Life	After exposure part remains within specified electrical parameters for L, Q and DCR.	Subject parts to an environment of +50°C 90 to 100% R.H. for 46 to 50 hours. After exposure, allow parts to dry for 2 hours before measurements are taken.						
Moisture Resistance	After exposure, part shall not have a shorted or open winding.	Per MIL-STD 202 Method 106, ten 24 hour cycles at +25°C to +65°C at 80 to 95% R.H. During any of the first 9 cycles, inductors are revolved from the chamber and exposed to -10°C for 3 hours. Allow parts to dry for 2 hours before measurements are taken.						
Temperature Cycle	After exposure part remains within specified electrical parameters for L, Q and DCR.	10 cycles (Air to Air) 1 cycle shall consist of: 30 minutes exposure to +85°C 30 minutes exposure to -40°C Allow 20 minutes transition between extremes.						
Temperature Shock	After exposure part remains within specified electrical parameters for L, Q and DCR.	10 cycles (Air to Air) 1 cycle shall consist of: 30 minutes exposure to -45°C 30 minutes exposure to +125°C 15 seconds maximum transition between temperatures						
General								
Range	-40°C to +85°C							
Operating	-40°C to +85°C							
Flammability	IEC 695-2-2	Withstands needle-flame test						
Other								
Vibration	After exposure part remains within specified electrical parameters for L, Q and DCR.	Inductors shall be randomly vibrated per NAVMAT P9492 profile. Samples shall be subjected to 0.04G/Hz for a minimum of 15 minutes per axis, for each of the three axes.						
Mechanical Shock	After exposure part remains within specified electrical parameters for L, Q and DCR.	Test per MIL-STD 202 method 213 test condition A, test mounted samples 3 axes, 6 times, totaling 18 shocks. (50Gs, 11ms, half-sine).						
Solderability	Wetting shall cover 90% minimum of	Dip pads in RMA flux, 63/37 solder (Sn/Pb) at 232°C for 5 seconds						
Component Adhesion	4 pounds	Apply and measure force with a digital force gauge set.						
Resistance to Solvent	No sign of degradation in appearance or marking detail.	Withstands 6 minutes of alcohol. Withstands 3 minutes forced spray Freon TMS						
Load Life	After exposure, part shall not have a shorted or open winding.	Parts to be stored at 110°C for 1000 hours with rated current applied. Parts to be tested at: start, 500 and 1000 hours. Allow 2 hours at room temperature before testing.						
 RoHS Compliant								
For Print Distribution to Customers		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 2px;">Series</td><td style="width: 50%; padding: 2px;">Revision</td></tr> <tr> <td style="padding: 2px;">MGDS5</td><td style="padding: 2px;">B0</td></tr> <tr> <td colspan="2" style="text-align: center; padding: 2px;">Sheet 3 of 3</td></tr> </table>	Series	Revision	MGDS5	B0	Sheet 3 of 3	
Series	Revision							
MGDS5	B0							
Sheet 3 of 3								