Midcom
TransformingMagnetics™
SwitchmodePower

Surface Mount Drum Core Power Inductors: DUW-5523 Series

DOT LOCATES START LEAD
.236 MAX. [6.00]
.410 MAX. [10.41]
.400 REF. [10.16]
.550 MAX. [13.97]
MIDCOM 5523-XXX
LOT CODE & DATE CODE
"XXX" INDICATES VALUE

S
F

.395(2) [10.03]
.175(2) [4.45]
.295 [7.49]
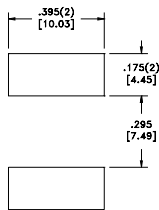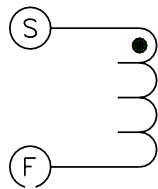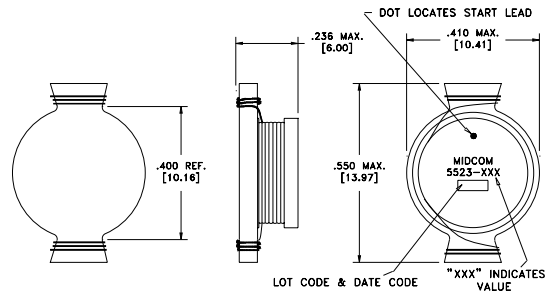
MOUNTING PATTERN

Features
- Economical, reliable SMD inductors
- Inductance range: 0.47uH to 100 uH
- Excellent current rating in a low-profile package
- High energy storage and extremely low resistance
- Excellent saturating (>11A) and continuous current capabilities (>10A)
- Designed for pick and place operations
- Compatible with solder reflow processes to 240°C

Applications
- Economical, medium current inductors for DC/DC converter supplies
- Low inductance with medium current for high-frequency, medium and low voltage supplies
- Inductors for DC/DC conversion circuits in notebook computer, peripheral, cellular phone, process control, factory automation and test industries
- Useful in battery-powered and low voltage converters

Environmental Specifications
- Operating temperature range: -40°C to +85°C
- Storage temperature range: -50°C to +125°C

Packaging
- Parts are packaged in 24 mm embossed carrier tape per EIA-481-2
- DUW-5523 is packaged 650 pieces per 13" reel

Part Number	(Note 1) Inductance uH +/- 20%	(Note 2) DCR (ohms max)	(Note 3) Isat (Adc)	(Note 4) Icont (Adc)
DUW-5523-R47R	0.47 *	0.0049	11.4	10.6
DUW-5523-1R0R	1.0	0.0065	9.90	9.3
DUW-5523-1R5R	1.5	0.0081	7.90	8.3
DUW-5523-2R2R	2.2	0.0107	6.10	7.2
DUW-5523-3R3R	3.3	0.0128	5.10	6.5
DUW-5523-4R7R	4.7	0.0165	4.20	5.5
DUW-5523-6R8R	6.8	0.0202	3.60	5.0
DUW-5523-100R	10.0	0.0297	3.30	4.3
DUW-5523-150R	15.0	0.0410	2.40	3.5
DUW-5523-220R	22.0	0.0617	2.00	2.8
DUW-5523-330R	33.0	0.0917	1.70	2.1
DUW-5523-470R	47.0	0.1388	1.40	1.7
DUW-5523-680R	68.0	0.1787	1.20	1.5
DUW-5523-101R	100.0	0.2707	0.95	1.2

* Minimum inductance at Isat, 0.60µH nominal inductance

NOTES:
1. Open circuit inductance test at 100KHz, 0.1 Vrms, 0.0Adc
2. DCR limits at 20°C
3. Saturating DC current for approximately 20% rolloff from initial inductance
4. Continuous DC current for approximate temperature rise of 40°C from a 25°C ambient