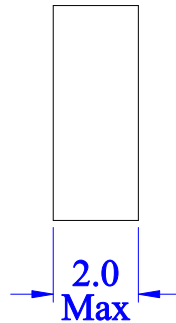
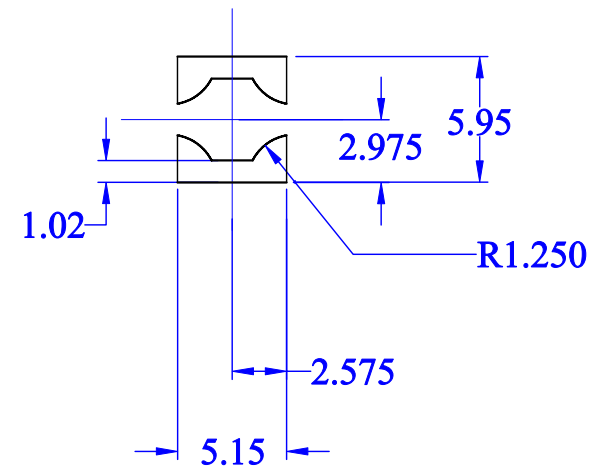


**SIDE VIEW**

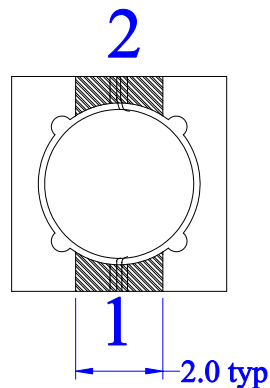


**RECOMMENDED PCB LAYOUT**

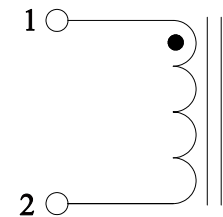
**2 PAD LAYOUT**



**BOTTOM VIEW**



**SCHEMATIC**



- Notes:
- 1) All Dimensions are in millimeters unless otherwise specified.
  - 2) All soldering surfaces to be coplanar within 0.10 millimeters.
  - 3) See Page 4 for Letter Designation Table
  - 4) PCB tolerances are +/- 0.2 unless stated otherwise.
  - 5) Part Marking: Line 1---3 Digit Marking-- (1st digit: Indicates inductance value per letter designation table on page 4); (2nd digit: Bi-weekly production date code); (3rd digit: Last digit of year produced) O (Indicates Size)
  - 6) RoHS Compliant

**Cooper Electronic Technologies**  
 1225 Broken Sound Pkwy NW Suite F Boca Raton, FL 33487  
 Shielded Drum Core (SD20C) SMT Inductor Line  
 2.0 mm height  
 Mechanical Specifications

Size	Drawing Number:	SD20C-R Inductor Line
A	Revision Level:	B Sheet 3 of 29

## CUSTOMER INFORMATION

### 2.0mm Shielded Drum Core (SD20C) Family Table

Part Number	Rated Inductance ( $\mu$ H)	OCL nominal +/-20% ( $\mu$ H)	Part Marking Designator	$I_{RMS}$ Amperes for approximately a $\Delta T$ of 40°C. above 85°C ambient	$I_{SAT}$ Amperes Peak for approximately 30% rolloff (@ 20°C).	DCR ( $\Omega$ ) typ. @ 20°C.
<a href="#">SD20C-R47</a>	0.47	0.490	A	3.59	4.00	0.0200
<a href="#">SD20C-1R2</a>	1.20	1.21	B	3.07	2.55	0.0275
<a href="#">SD20C-1R5</a>	1.50	1.69	C	2.88	2.15	0.0312
<a href="#">SD20C-2R2</a>	2.20	2.25	D	2.45	1.87	0.0429
<a href="#">SD20C-3R3</a>	3.30	3.61	E	2.17	1.47	0.0547
<a href="#">SD20C-4R7</a>	4.70	4.41	F	2.05	1.33	0.0612
<a href="#">SD20C-6R2</a>	6.20	6.25	G	1.89	1.12	0.0720
<a href="#">SD20C-8R2</a>	8.20	8.41	H	1.61	0.966	0.1000
<a href="#">SD20C-100</a>	10.0	9.61	J	1.53	0.903	0.1100
<a href="#">SD20C-150</a>	15.0	15.21	K	1.25	0.718	0.1655
<a href="#">SD20C-220</a>	22.0	22.09	L	1.12	0.596	0.2053
<a href="#">SD20C-330</a>	33.0	32.49	M	0.913	0.491	0.3100
<a href="#">SD20C-470</a>	47.0	47.61	N	0.745	0.406	0.4650
<a href="#">SD20C-680</a>	68.0	68.89	O	0.610	0.337	0.6947
<a href="#">SD20C-820</a>	82.0	82.81	P	0.576	0.308	0.7785
<a href="#">SD20C-101</a>	100	98.01	Q	0.495	0.283	1.06
<a href="#">SD20C-151</a>	150	151.3	R	0.435	0.228	1.37
<a href="#">SD20C-221</a>	220	222.0	S	0.356	0.188	2.04
<a href="#">SD20C-331</a>	330	327.6	T	0.294	0.155	2.99
<a href="#">SD20C-471</a>	470	470.9	U	0.263	0.129	3.74
<a href="#">SD20C-681</a>	680	681.2	V	0.216	0.107	5.56
<a href="#">SD20C-821</a>	820	823.7	W	0.204	0.098	6.22
<a href="#">SD20C-102</a>	1000	1004.9	X	0.172	0.088	8.73

**Electrical Requirement Notes:** 1) Test Parameters: 100KHz, 0.25Vrms      2) DCR @ 20°C

**Part number definition:**

First 4 characters = Product code and size.  
Last 3 characters = Inductance in  $\mu$ H. R=decimal point.  
If no R is present third character = # of zeros.

**(1) Units supplied in tape and reel packaging. 13" reels 2900 parts per reel. Meets EIA-481 standard**

**Cooper Electronic Technologies**

1225 Broken Sound Pkwy NW Suite F Boca Raton, FL 33487

**Shielded Drum Core, (SD20C) SMT Inductor Line**  
**2.0 mm height.**

Electrical Specifications

Option Code (Suffix)	Description
-R	RoHS Compliant Version

SIZE	Drawing Number:	<b>SD20C-R Inductor Line</b>
A	Revision Level:	B      Sheet 4 of 29