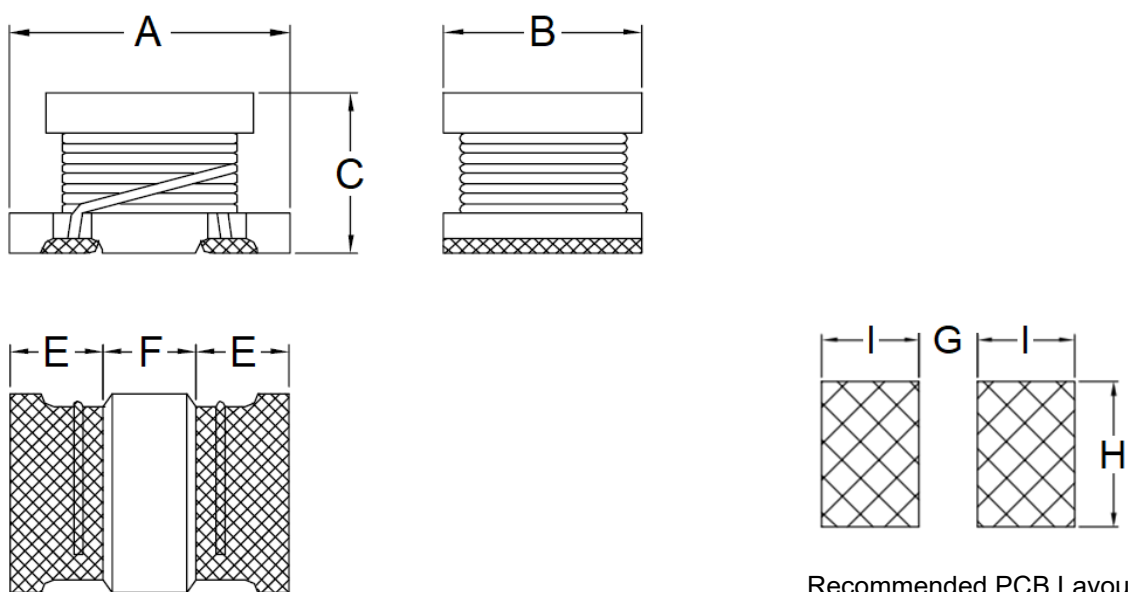


1. Part No. Expression

S D I 4 5 3 2 2 6 1 R 0 M F
 (a) (b) (c) (d) (e)

- (a) Series Code (d) Tolerance Code
 (b) Dimension Code (e) Packaging Code
 (c) Inductance Code

2. Configuration & Dimensions (Unit: mm)



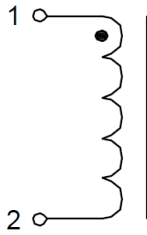
Recommended PCB Layout

Note: The above PCB layout reference only.

A	B	C	E	F	G	H	I
4.5±0.3	3.2±0.2	2.6±0.3	1.0 Min	1.0 Min	1.2 Ref	3.0 Ref	2.0 Ref

NOTE: Specifications subject to change without notice. Please check our website for latest information.

3. Schematic



4. General Specifications

- (a) Operating Temp.: - 30°C to + 105°C (including self-temperature rise)
- (b) All test data referenced to 25°C ambient.
- (c) Storage Condition (Component in its packaging)
 - i) Temperature: -10°C to +40°C
 - ii) Humidity: Less than 60% RH

NOTE: Specifications subject to change without notice. Please check our website for latest information.

5. Electrical Characteristics

Part Number	Inductance (μ H) @0A	Tolerance	Q Min	Test Frequency (Hz)	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
SDI453226-1R0□F	1.00	M	20	1M	120.0	0.20	500
SDI453226-1R2□F	1.20	M	20	1M	100.0	0.20	500
SDI453226-1R5□F	1.50	M	20	1M	85.0	0.30	500
SDI453226-1R8□F	1.80	M	20	1M	75.0	0.30	500
SDI453226-2R2□F	2.20	M	20	1M	62.0	0.30	500
SDI453226-2R7□F	2.70	M	20	1M	53.0	0.32	500
SDI453226-3R3□F	3.30	M	20	1M	47.0	0.35	500
SDI453226-3R9□F	3.90	M	20	1M	41.0	0.38	500
SDI453226-4R7□F	4.70	M,K	30	1M	38.0	0.40	500
SDI453226-5R6□F	5.60	M,K	30	1M	33.0	0.47	500
SDI453226-6R8□F	6.80	M,K	30	1M	31.0	0.50	450
SDI453226-8R2□F	8.20	M,K	30	1M	27.0	0.56	450
SDI453226-100□F	10.00	K,J	35	1M	23.0	0.56	400
SDI453226-120□F	12.00	K,J	35	1M	21.0	0.62	380
SDI453226-150□F	15.00	K,J	35	1M	19.0	0.73	360
SDI453226-180□F	18.00	K,J	35	1M	17.0	0.82	340
SDI453226-220□F	22.00	K,J	35	1M	15.0	0.94	320
SDI453226-270□F	27.00	K,J	35	1M	14.0	1.10	300
SDI453226-330□F	33.00	K,J	35	1M	12.0	1.20	270
SDI453226-390□F	39.00	K,J	35	1M	11.0	1.40	240

Note:

Tolerance Code: J=±5%, K=±10%, M=±20%

NOTE: Specifications subject to change without notice. Please check our website for latest information.



Part Number	Inductance (μ H) @0A	Tolerance	Q Min	Test Frequency (Hz)	SRF (MHz) Min	DCR (Ω) Max	IDC (mA) Max
SDI453226-470□F	47.00	K,J	35	1M	10.0	1.50	220
SDI453226-560□F	56.00	K,J	35	1M	9.3	1.70	200
SDI453226-680□F	68.00	K,J	35	1M	8.4	1.90	180
SDI453226-820□F	82.00	K,J	35	1M	7.5	2.20	170
SDI453226-101□F	100.00	K,J	40	796K	6.8	2.50	160
SDI453226-121□F	120.00	K,J	40	796K	6.2	3.00	150
SDI453226-151□F	150.00	K,J	40	796K	5.5	3.70	130
SDI453226-181□F	180.00	K,J	40	796K	5.0	4.50	120
SDI453226-221□F	220.00	K,J	40	796K	4.5	5.40	110
SDI453226-271□F	270.00	K,J	40	796K	4.0	6.80	100
SDI453226-331□F	330.00	K,J	40	796K	3.6	8.20	95
SDI453226-391□F	390.00	K,J	40	796K	3.3	9.70	90
SDI453226-471□F	470.00	K,J	40	796K	3.0	11.80	80
SDI453226-561□F	560.00	K,J	40	796K	2.7	14.50	70
SDI453226-681□F	680.00	K,J	40	796K	2.5	17.00	65
SDI453226-821□F	820.00	K,J	40	796K	2.2	20.50	60
SDI453226-102□F	1000.00	K,J	40	252K	2.0	25.00	50
SDI453226-122□F	1200.00	K,J	40	252K	1.8	30.00	45
SDI453226-152□F	1500.00	K,J	40	252K	1.6	37.00	40
SDI453226-182□F	1800.00	K,J	40	252K	1.5	45.00	35
SDI453226-222□F	2200.00	K,J	40	252K	1.3	50.00	30

Note:

Tolerance Code: J=±5%, K=±10%, M=±20%

NOTE: Specifications subject to change without notice. Please check our website for latest information.



6. Soldering Specification

Mildly activated rosin fluxes are preferred. Our terminations are suitable for re-flow soldering systems. If hand soldering cannot be avoided, the preferred technique is the utilization of hot air soldering tools.

6-1. IR Soldering Reflow

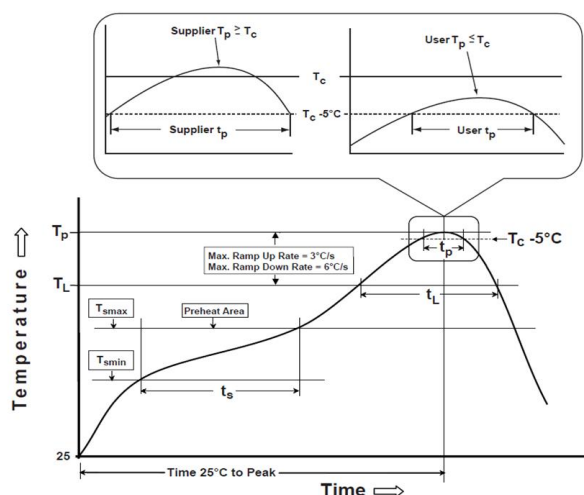
Recommended temperature profiles for lead free re-flow soldering in Figure 1, Table 1.1 & 1.2 (J-STD-020E).

6-2. Iron Reflow

Products attachment with a soldering iron is discouraged due to the inherent process control limitations. In the event that a soldering iron must be employed the following precautions are recommended (Figure 2).

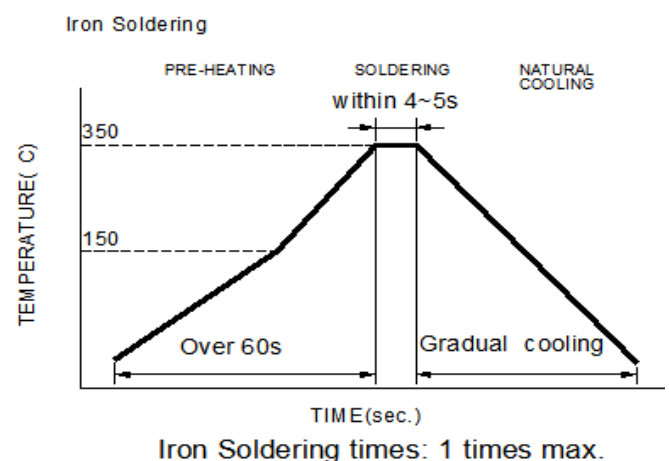
Note:

- Preheat circuit and products to 150°C.
- 355°C tip temperature (Max.)
- Never contact the ceramic with the iron tip
- 1.0mm tip diameter (Max.)
- Use a 20 watt soldering iron with tip diameter of 1.0mm
- Limit soldering time to 4~5 sec.



Reflow times: 3 times Max

Figure 1: IR Soldering Reflow



Soldering iron method: 350±5°C Max

Figure 2: Iron soldering temperature profiles

NOTE: Specifications subject to change without notice. Please check our website for latest information.

Table (1.1) Reflow Profiles

Profile Type:	Pb-Free Assembly
Preheat	
-Temperature Min (T_{smin})	150°C
-Temperature Max (T_{smax})	200°C
-Time (t_s) from (T_{smin} to T_{smax})	60-120seconds
Ramp-up rate (T_L to T_p)	3°C /second max.
Liquids temperature (T_L)	217°C
Time (t_L) maintained above T_L	60-150 seconds
Classification temperature (T_c)	See Table (1.2)
Time (t_p) at $T_c - 5^\circ\text{C}$ (T_p should be equal to or less than T_c .)	* < 30 seconds
Ramp-down rate (T_p to T_L)	6°C /second max.
Time 25°C to peak temperature	8 minutes max.

T_p: maximum peak package body temperature, **T_c**: the classification temperature.

For user (customer) **T_p** should be equal to or less than **T_c**.

*Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.

Table (1.2) Package Thickness/Volume and Classification Temperature (T_c)

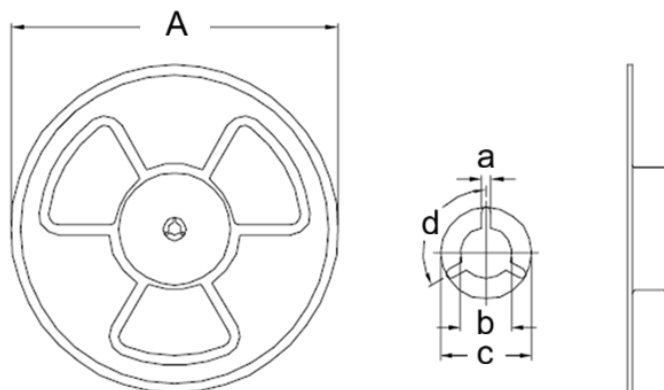
	Package Thickness	Volume mm ³ <350	Volume mm ³ 350-2000	Volume mm ³ >2000
PB-Free Assembly	<1.6mm	260°C	260°C	260°C
	1.6-2.5mm	260°C	250°C	245°C
	≥2.5mm	250°C	245°C	245°C

Reflow is referred to standard IPC/JEDEC J-STD-020E.

NOTE: Specifications subject to change without notice. Please check our website for latest information.

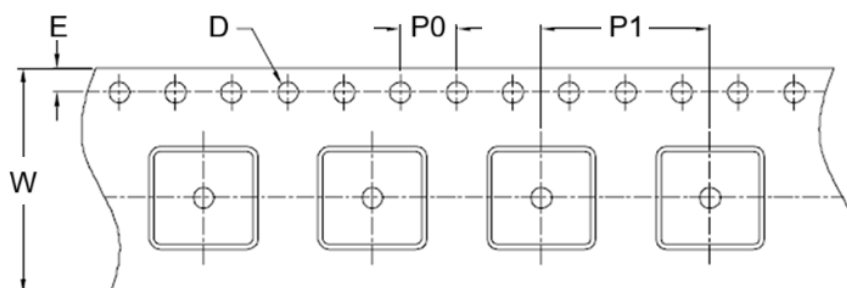
7. Packaging Information

7-1. Reel Dimension (Unit: mm)

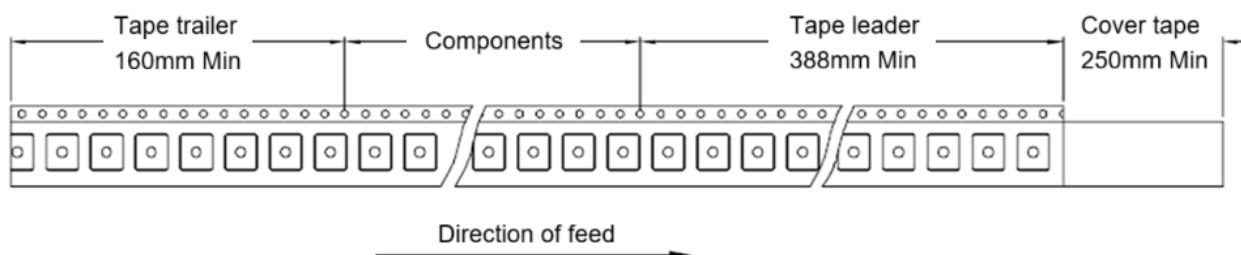


Type	A	a	b	c	d
7"x12mm	178.0 Ref	2.5 Ref	13.0 Ref	23.0 Ref	120°

7-2. Tape Dimension (Unit: mm)



W	E	D	P0	P1
12.00	1.75±0.10	1.50+0.10/-0.00	4.00±0.10	12.00

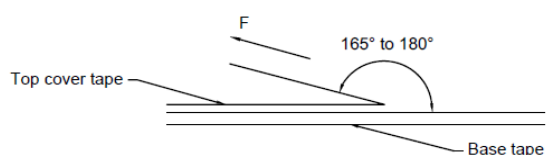


NOTE: Specifications subject to change without notice. Please check our website for latest information.

7-3. Packaging Quantity (Unit: Pcs)

Inner: Reel		Outer: Carton		
Qty (Pcs)	G.W. (Kg)	Qty (Pcs)	G.W. (Kg)	Size (cm)
500	0.14	24,000	11	45 x 38 x 21

7-4. Tearing Off Force



The force for tearing off cover tape is according to the follow table, in the arrow direction under the following conditions.

(Referenced ANSI/EIA-481-D-2008 of 4.11 standard)

Room Temp. (°C)	Room Humidity (%)	Room atm (hPa)	Tearing Speed (mm/min)
5~35	45~85	860~1060	300±10

Tape Size	8 mm	12 to 56 mm	72 mm or Wider
Tearing Off Force (grams)	10~100	10~130	10~150

Application Notice

1. Storage Conditions

To maintain the solderability of terminal electrodes:

- (a) Recommended products should be used within 12 months from the time of delivery.
- (b) The packaging material should be kept where no chlorine or sulfur exists in the air.

2. Transportation

- (a) Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
- (b) Vacuum pick up is strongly recommended for individual components.
- (c) Bulk handling should ensure that abrasion and mechanical shock are minimized.

NOTE: Specifications subject to change without notice. Please check our website for latest information.