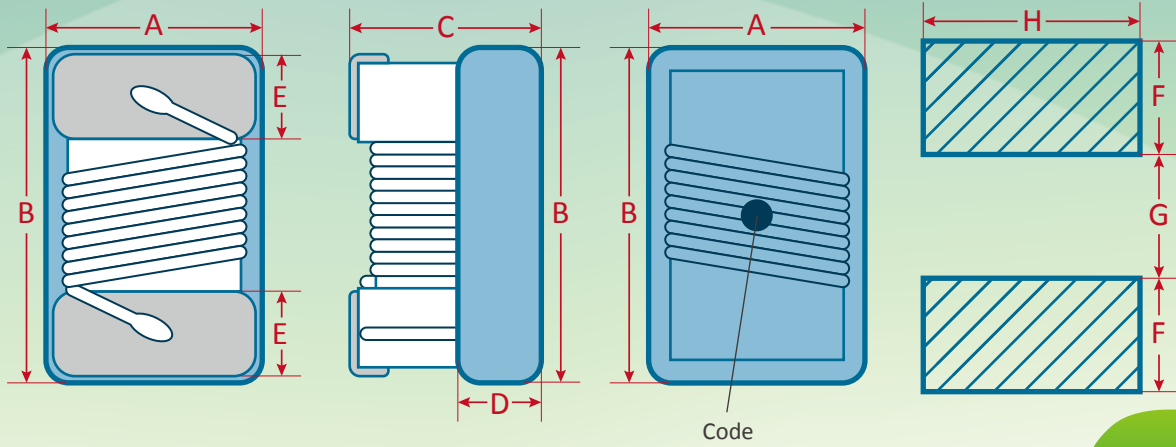




# FSR Series

## Surface Mountable Type

Shape and Dimensions(mm):



Item	A	B	C	D	E	F	G	H
FSR03	1.2 Max.	1.8 Max.	1.1 Max.	0.45 Ref.	0.33±0.1	0.64 Typ.	0.64 Typ.	1.02 Typ.
FSR03-B	1.2 Max.	1.8 Max.	1.0 Max.	0.45 Ref.	0.33±0.1	0.64 Typ.	0.64 Typ.	1.02 Typ.
FSR03-H	1.2 Max.	1.8 Max.	1.0 Max.	0.45 Ref.	0.33	0.64 Typ.	0.64 Typ.	1.02 Typ.

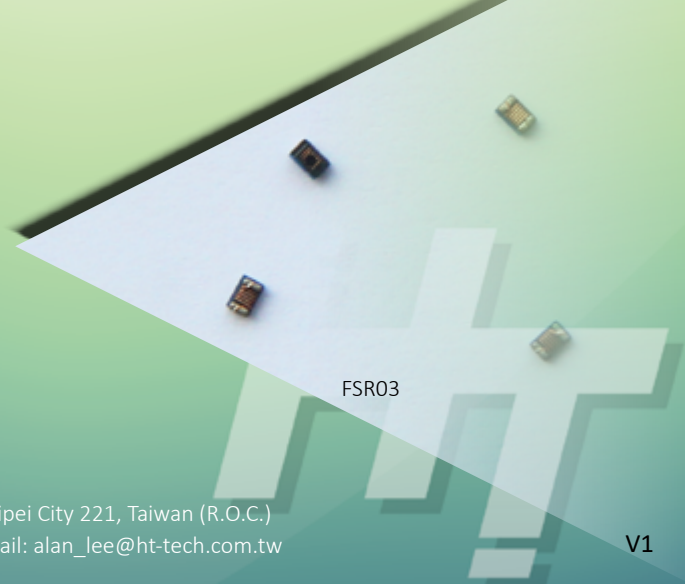
### FSR03

Part No.	Inductance		Q		DCR(mΩ)		SRF(MHz)		I <sub>sat</sub> (A)	I <sub>rms</sub> (A)	Tolerance (±%)	Color Coding
	(uH)	(MHz)	Min.	(MHz)	Max.	Min.	Max.	Typ.				
FSR03KT47N	0.047	7.9	12	7.9	75	2000	1.8	1.6	10	White		
FSR03KT51N	0.051	7.9	12	7.9	75	1500	1.8	1.5	10	Violet		
FSR03KT56N	0.056	7.9	7.0	7.9	95	1500	2.2	1.6	10	Blue		
FSR03KT68N	0.068	7.9	10	7.9	120	1500	2.2	1.7	10	Gray		
FSR03KT72N	0.072	7.9	12	7.9	120	1500	2.2	1.6	10	Brown		
FSR03KTR10	0.1	7.9	12	7.9	130	1150	2.2	1.3	10	Black		
FSR03KTR12	0.12	7.9	12	7.9	150	1100	1.9	1.3	10	Orange		
FSR03KTR15	0.15	7.9	15	7.9	150	1050	1.8	1.1	10	Brown		
FSR03KTR18	0.18	7.9	15	7.9	150	950	1.8	1.1	10	Green		
FSR03KTR22	0.22	7.9	15	7.9	300	900	1.3	0.99	10	Red		
FSR03KTR24	0.24	7.9	15	7.9	160	850	1.7	1.1	10	Green		
FSR03KTR27	0.27	7.9	15	7.9	300	835	1.4	1.0	10	Yellow		
FSR03KTR33	0.33	7.9	15	7.9	400	725	1.3	1.0	10	Orange		
FSR03KTR36	0.36	7.9	15	7.9	410	720	1.3	0.99	10	Green		
FSR03KTR39	0.39	7.9	15	7.9	410	680	1.2	0.99	10	Blue		
FSR03KTR47	0.47	7.9	15	7.9	430	640	1.2	0.86	10	Black		
FSR03KTR56	0.56	7.9	15	7.9	440	630	1.2	0.86	10	Brown		
FSR03KTR65	0.65	7.9	15	7.9	520	510	1.0	0.81	10	Blue		
FSR03KTR68	0.68	7.9	15	7.9	520	510	1.0	0.78	10	Red		
FSR03KTR78	0.78	7.9	15	7.9	630	465	0.99	0.78	10	Orange		
FSR03KTR82	0.82	7.9	15	7.9	690	460	0.99	0.76	10	Yellow		
FSR03KTR90	0.9	7.9	15	7.9	810	350	0.95	0.7	10	Black		
FSR03KT1R0	1.0	7.9	15	7.9	810	320	0.85	0.7	10	Green		

Part No.	Inductance		Q		DCR(mΩ)		SRF(MHz)		Isat(A)		Tolerance (±%)	Color Coding
	(uH)	(MHz)	Min.	(MHz)	Max.	Min.	Max.	Typ.				
FSR03KT1R2	1.2	7.9	15	7.9	870	270	0.85	0.59	10	Blue		
FSR03KT1R5	1.5	7.9	15	7.9	960	230	0.83	0.57	10	Violet		
FSR03KT1R8	1.8	7.9	15	7.9	1100	210	0.82	0.54	10	Gray		
FSR03KT2R2	2.2	7.9	15	7.9	1200	115	0.72	0.54	10	White		
FSR03KT2R7	2.7	7.9	15	7.9	1380	100	0.7	0.46	10	Black		
FSR03KT3R0	3.0	7.9	15	7.9	1450	90	0.68	0.43	10	Black		
FSR03KT3R3	3.3	7.9	15	7.9	1500	84	0.64	0.48	10	Brown		
FSR03KT3R9	3.9	7.9	15	7.9	1500	75	0.63	0.48	10	Red		
FSR03KT4R7	4.7	7.9	15	7.9	2100	67	0.53	0.38	10	Orange		
FSR03KT5R6	5.6	7.9	15	7.9	2370	55	0.51	0.36	10	Yellow		
FSR03KT6R8	6.8	7.9	15	7.9	3100	48	0.49	0.35	10	Green		
FSR03KT7R8	7.8	7.9	15	7.9	3350	40	0.42	0.32	10	Blue		
FSR03KT8R2	8.2	7.9	15	7.9	3500	38	0.45	0.32	10	Violet		
FSR03KT100	10	7.9	15	7.9	4460	32	0.37	0.28	10	Gray		
FSR03KT150	15	7.9	14	7.9	9500	25	0.24	0.17	10	White		

**FSR03-B 導磁係數 : 400μ**

Part No.	Inductance		Q		DCR(mΩ)		SRF(MHz)		Idc(A)	Irms(A)	Tolerance (±%)	Color Coding
	(uH)	(MHz)	Typ.	(MHz)	±30%	Typ.	Typ.					
FSR03KT1R0-B	1.0	7.9	16	7.9	320	390	0.86	0.7	10	Black		
FSR03KT1R5-B	1.5	7.9	16	7.9	400	160	0.72	0.6	10	Brown		
FSR03KT1R8-B	1.8	7.9	16	7.9	430	121	0.64	0.58	10	Red		
FSR03KT2R2-B	2.2	7.9	16	7.9	560	103	0.6	0.58	10	Orange		
FSR03KT2R7-B	2.7	7.9	16	7.9	620	72	0.54	0.5	10	Yellow		
FSR03KT3R3-B	3.3	7.9	16	7.9	700	66	0.5	0.5	10	Green		
FSR03KT3R9-B	3.9	7.9	16	7.9	830	61	0.46	0.46	10	Blue		
FSR03KT4R7-B	4.7	7.9	16	7.9	970	51	0.4	0.42	10	Violet		
FSR03KT5R6-B	5.6	7.9	16	7.9	1100	47	0.38	0.38	10	Gray		
FSR03KT6R8-B	6.8	7.9	16	7.9	1500	43	0.34	0.34	10	White		
FSR03KT8R2-B	8.2	7.9	16	7.9	1680	40	0.3	0.3	10	Black		
FSR03KT100-B	10	2.5	14	2.5	1850	36	0.28	0.28	10	Brown		
FSR03KT120-B	12	2.5	14	2.5	2280	32	0.26	0.26	10	Red		
FSR03KT150-B	15	2.5	14	2.5	2600	29	0.24	0.24	10	Orange		
FSR03KT180-B	18	2.5	14	2.5	2900	28	0.22	0.22	10	Yellow		
FSR03KT220-B	22	2.5	14	2.5	3610	24	0.2	0.2	10	Green		
FSR03KT270-B	27	2.5	14	2.5	5200	20	0.14	0.14	10	Blue		
FSR03KT330-B	33	2.5	14	2.5	6600	15	0.12	0.12	10	Violet		



FSR03

**FSR03-H 導磁係數 : 800 $\mu$** 


Part No.	Inductance		Q Typ.	DCR(m $\Omega$ ) $\pm$ 30%	SRF(MHz) Typ.	Idc(A) Typ.	Irms(A) Typ.	Tolerance ( $\pm$ %)	Color Coding	
	( $\mu$ H)	(MHz)								
FSR03KTR27-H	0.27	7.9	13	7.9	260	900	0.95	0.82	10	Green
FSR03KTR47-H	0.47	7.9	13	7.9	260	900	0.92	0.8	10	Blue
FSR03KTR68-H	0.68	7.9	13	7.9	270	650	0.92	0.8	10	Violet
FSR03KTR78-H	0.78	7.9	16	7.9	280	410	0.92	0.8	10	Gray
FSR03KT1R0-H	1.0	7.9	16	7.9	320	390	0.86	0.7	10	Black
FSR03KT1R5-H	1.5	7.9	16	7.9	400	160	0.72	0.6	10	Brown
FSR03KT1R8-H	1.8	7.9	16	7.9	430	121	0.64	0.58	10	Red
FSR03KT2R2-H	2.2	7.9	16	7.9	560	103	0.6	0.58	10	Orange
FSR03KT2R7-H	2.7	7.9	16	7.9	620	72	0.54	0.5	10	Yellow
FSR03KT3R3-H	3.3	7.9	16	7.9	700	66	0.5	0.5	10	Green
FSR03KT3R9-H	3.9	7.9	16	7.9	830	61	0.46	0.46	10	Blue
FSR03KT4R7-H	4.7	7.9	16	7.9	970	51	0.4	0.42	10	Violet
FSR03KT5R6-H	5.6	7.9	16	7.9	1100	47	0.38	0.38	10	Gray
FSR03KT6R8-H	6.8	7.9	16	7.9	1500	43	0.34	0.34	10	White
FSR03KT8R2-H	8.2	7.9	16	7.9	1680	40	0.3	0.3	10	Black
FSR03KT100-H	10	2.5	14	2.5	1850	36	0.28	0.28	10	Brown
FSR03KT120-H	12	2.5	14	2.5	2280	32	0.26	0.26	10	Red
FSR03KT150-H	15	2.5	14	2.5	2600	29	0.24	0.24	10	Orange
FSR03KT180-H	18	2.5	14	2.5	2900	28	0.22	0.22	10	Yellow
FSR03KT220-H	22	2.5	14	2.5	3610	24	0.2	0.2	10	Green
FSR03KT270-H	27	2.5	14	2.5	5200	20	0.14	0.14	10	Blue
FSR03KT330-H	33	2.5	14	2.5	6600	15	0.12	0.12	10	Violet
FSR03KT470-H	47	2.5	12	2.5	11200	11	0.1	0.11	10	Gray

**Ordering information**
**FSR - 03 - K - T - 1R0**

(1) (2) (3) (4) (5)

- (1) Type : Surface Mountable Type
- (2) Size : 03(0603) is size
- (3) Tolerance : K=10%
- (4) Packaging style : Taping Reel
- (5) Inductance : 47N for 0.047 $\mu$ H, R10 for 0.1 $\mu$ H, 1R0 for 1.0 $\mu$ H, 100 for 10 $\mu$ H...

**Characteristics**
**FSR03**

- Isat for Inductance drop 35% from its value without current
- Irms for 40°C rise form 25°C ambient
- Operating temperature range from -25°C to 105°C

**FSR03-B and FSR03-H**

- Idc for Inductance drop 10% from its value without current
- Irms for a 15°C rise above 25°C ambient
- Operating temperature range from -25°C to 85°C

**Test equipment**
**FSR03 and FSR03-H**

- L, Q, SRF : Agilent/ HP E4991A+ Agilent/ HP16197A  
(The electrical specification test by the smallest gap position) or HP16193A
- DCR : Digital Milliohm Meter Chroma 16502, or equivalent

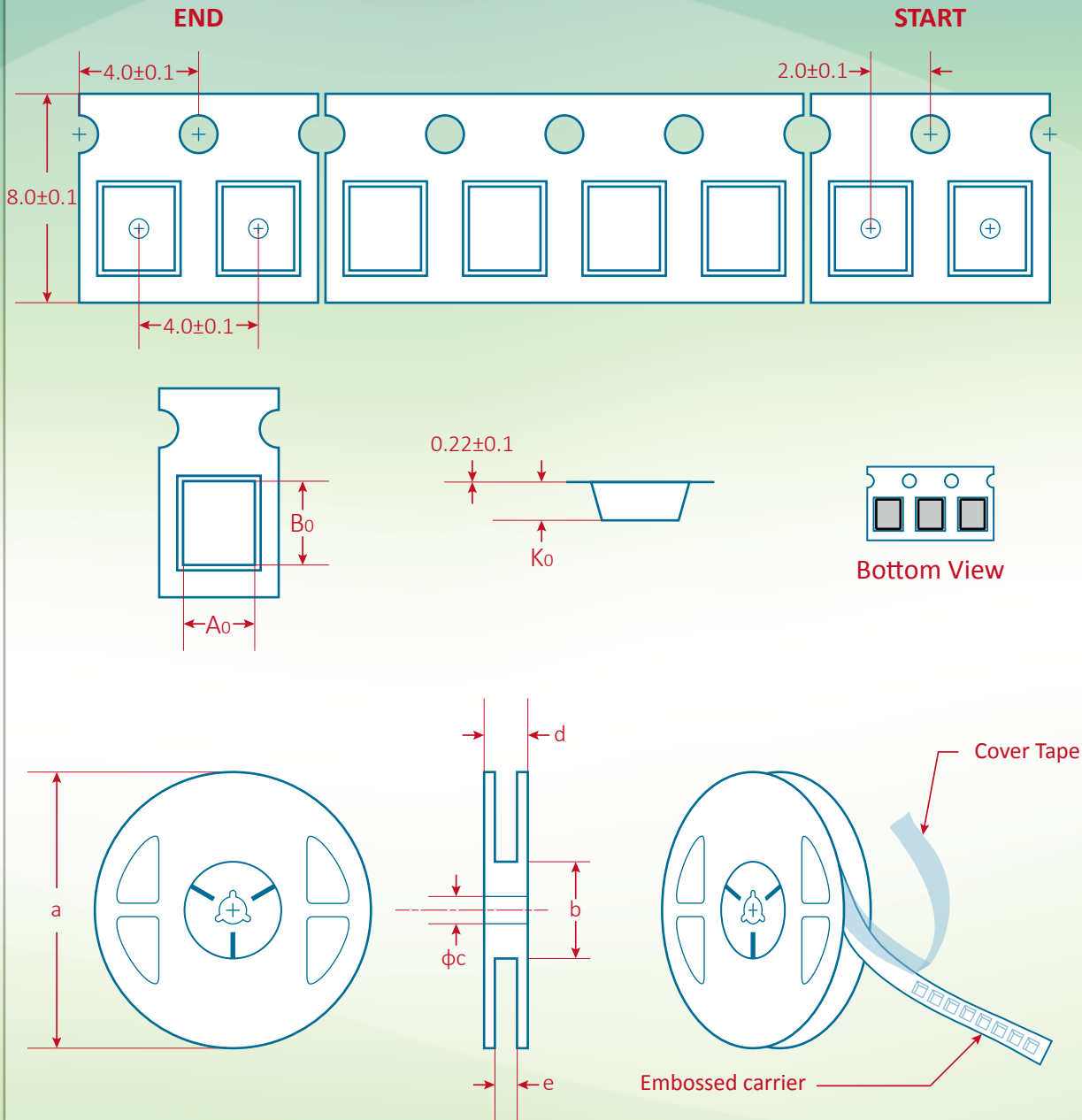
**FSR03-B**

- L, Q, SRF : Agilent/ HP 4291A or 4291B+Agilent/ HP 16197A
- Idc : Microtest LCR Meter 6379

FSR03-H

# Packing

Dimensions in mm

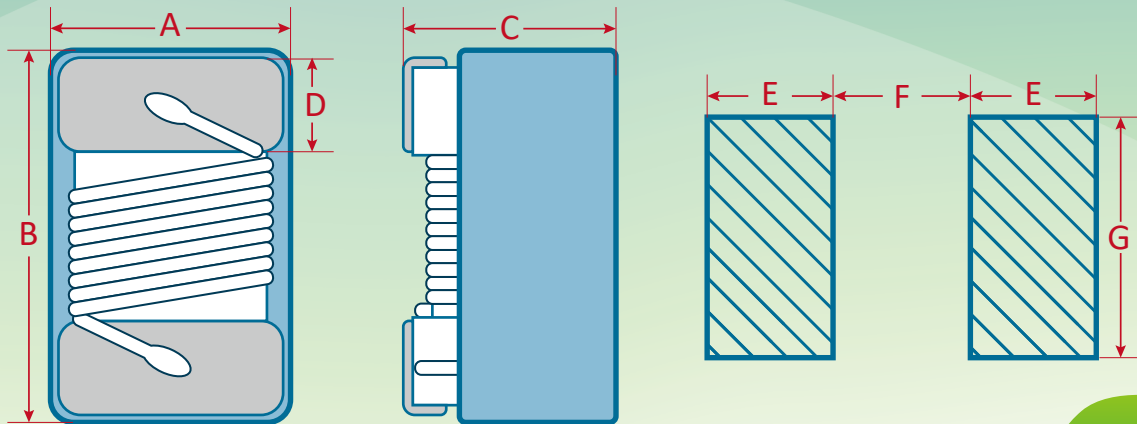


Item	Ao	Bo	Ko	a	b	$\phi_c$	d	e
FSR03	1.25±0.1	1.9±0.1	1.05±0.1	180	60	13	14.4	8.4
FSR03-B	1.3±0.1	1.8±0.1	1.1±0.1	180	60	13	14.4	8.4
FSR03-H	1.25±0.1	1.9±0.1	1.05±0.1	180	60	13	14.4	8.4
Reel								
Q'ty(Pcs)								
4,000								

# FSR Series

## Surface Mountable Type

Shape and Dimensions(mm):



Item	A	B	C	D	E	F	G
FSR03-E	1.15±0.1	1.75±0.1	1.0±0.05	0.33	0.64	0.64	1.02

### FSR03-E

Part No.	Inductance		DCR(mΩ) ±30%	Isat(A)		Irms(A) Typ.	Tolerance (±%)
	(uH)	(MHz)		Typ.	Max.		
FSR03□T1R0-E	1.0	1.0	140	0.86	0.78	1.40	M · N
FSR03□T2R2-E	2.2	1.0	220	0.63	0.56	1.10	M · N
FSR03□T4R7-E	4.7	1.0	420	0.44	0.40	0.82	M · N
FSR03□T100-E	10	1.0	950	0.30	0.25	0.60	M · N

### Ordering information

**FSR - 03 - M - T - 1R0 - E**

(1) (2) (3) (4) (5)

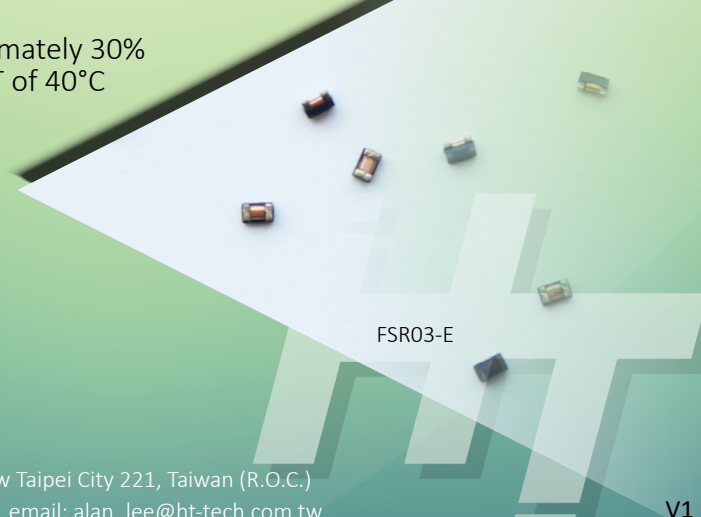
- ( 1 ) Type : Surface Mountable Type
- ( 2 ) Size : 03is size
- ( 3 ) Tolerance : M=20%, N=30%
- ( 4 ) Packaging style : Taping Reel
- ( 5 ) Inductance : R33 for 0.33uH, 1R0 for 1.0uH...

### Characteristics

- All test data is referred to 25°C ambient.
- Isat : DC current (A) that will cause Lo to drop approximately 30%
- Irms : DC current (A) that will cause an approximate ΔT of 40°C
- Operating temperature range : -40°C to +125°C

### Test equipment

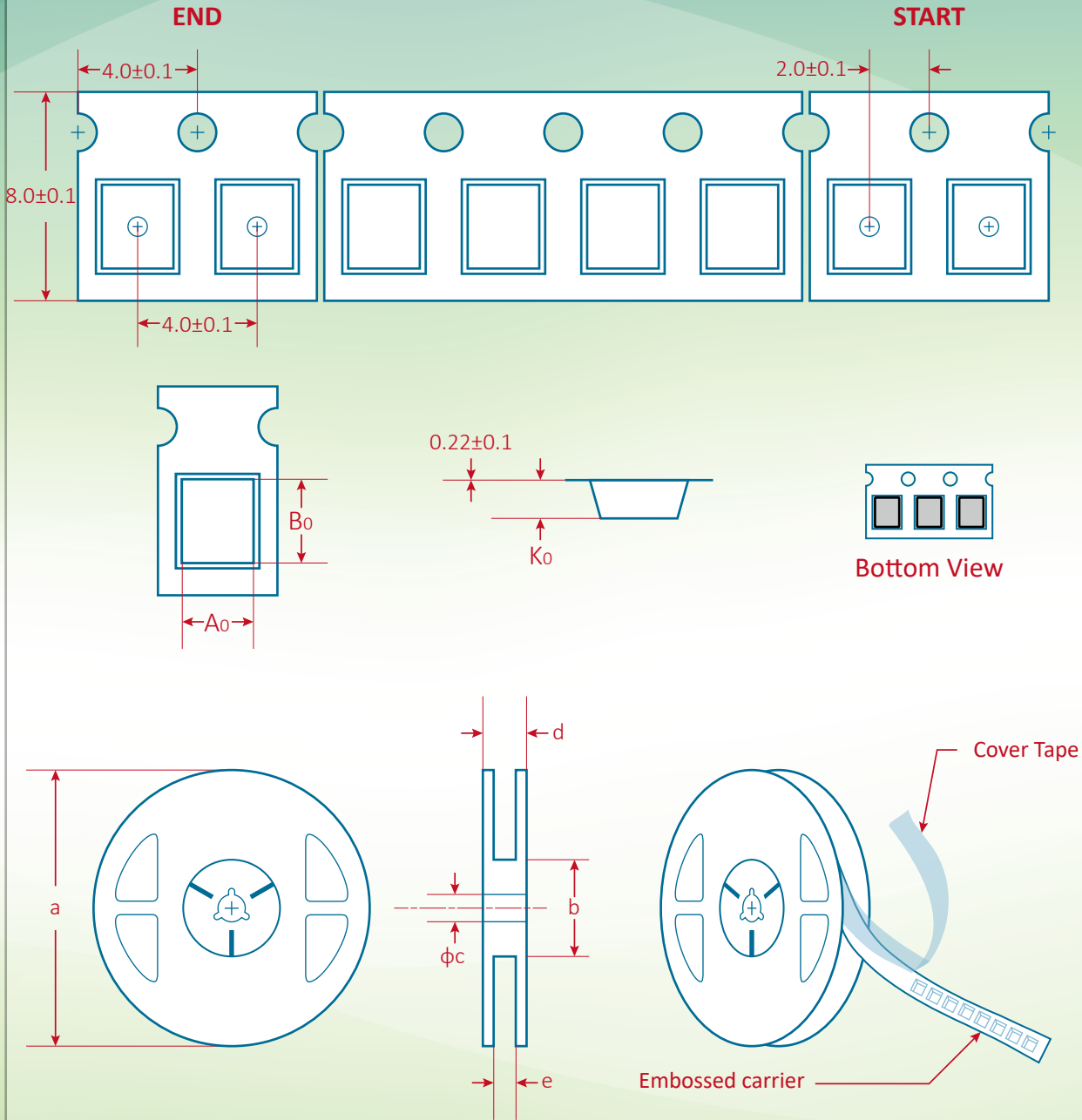
- Test Frequency : 1MHz
- L/Q/DCR : E4982A + Agilent 16197A



FSR03-E

# Packing

Dimensions in mm

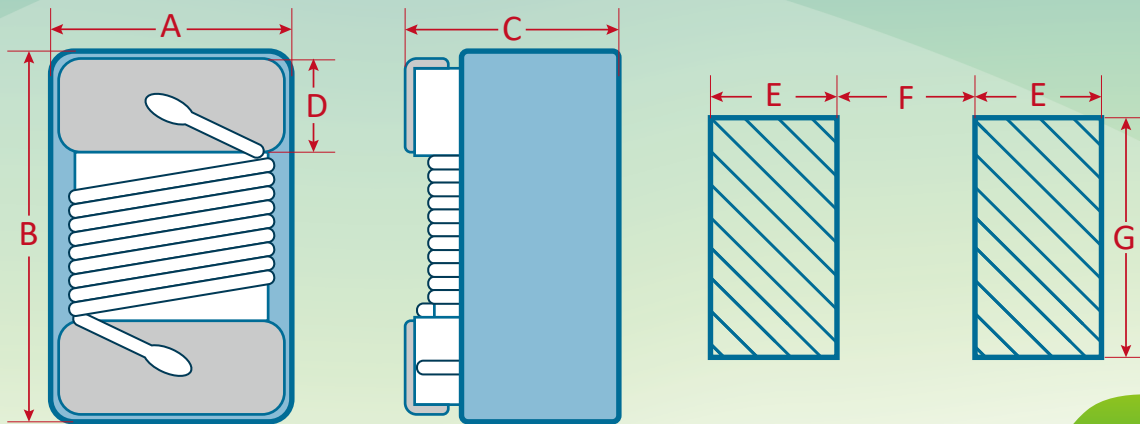


Item	A <sub>0</sub>	B <sub>0</sub>	K <sub>0</sub>	a	b	φ <sub>c</sub>	d	e
FSR03-E	1.25±0.1	1.9±0.1	1.05±0.1	180	60	13	14.4	8.4
Reel								
Q'ty(Pcs)								
4,000								

# FSR Series

## Surface Mountable Type

Shape and Dimensions(mm):



RoHS

Item	A	B	C	D	E	F	G
FSR03-MLT2	1.15±0.1	1.75±0.1	1.0±0.05	0.20	0.64	0.64	1.02

### FSR03-MLT2

Part No.	Inductance		DCR(mΩ) ±20%	Isat(A)		I <sub>rms</sub> (A) Typ.	Tolerance (±%)
	(uH)	(MHz)		Typ.	Max.		
FSR03MT1R0-MLT2	1.0	1.0	160	1.90	1.50	1.80	±20%
FSR03MT2R2-MLT2	2.2	1.0	240	1.50	1.20	1.40	±20%
FSR03MT4R7-MLT2	4.7	1.0	500	1.00	0.80	0.90	±20%
FSR03MT100-MLT2	10	1.0	1050	0.70	0.56	0.63	±20%

### Ordering information

**FSR - 03 - M - T - 1R0 - MLT2**

(1) (2) (3) (4) (5)

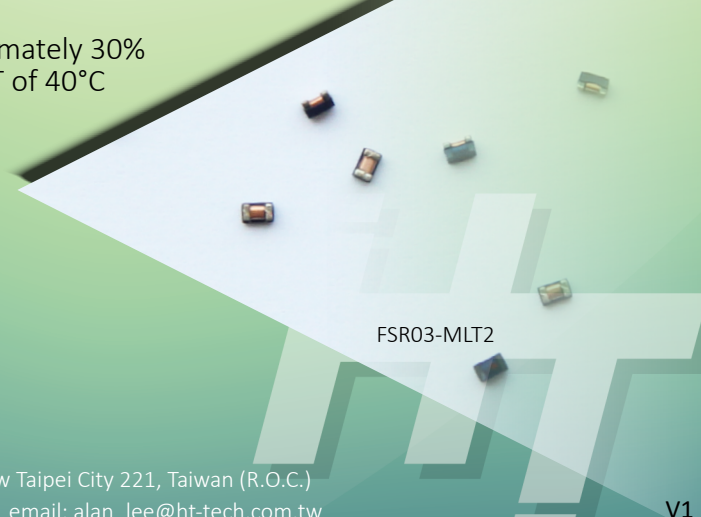
- ( 1 ) Type : Surface Mountable Type
- ( 2 ) Size : 03 is size
- ( 3 ) Tolerance : M=20%
- ( 4 ) Packaging style : Taping Reel
- ( 5 ) Inductance : R33 for 0.33uH, 1R0 for 1.0uH...

### Characteristics

- All test data is referred to 25°C ambient.
- Isat : DC current (A) that will cause L<sub>o</sub> to drop approximately 30%
- I<sub>rms</sub> : DC current (A) that will cause an approximate ΔT of 40°C
- Operating temperature range : -40°C to +125°C

### Test equipment

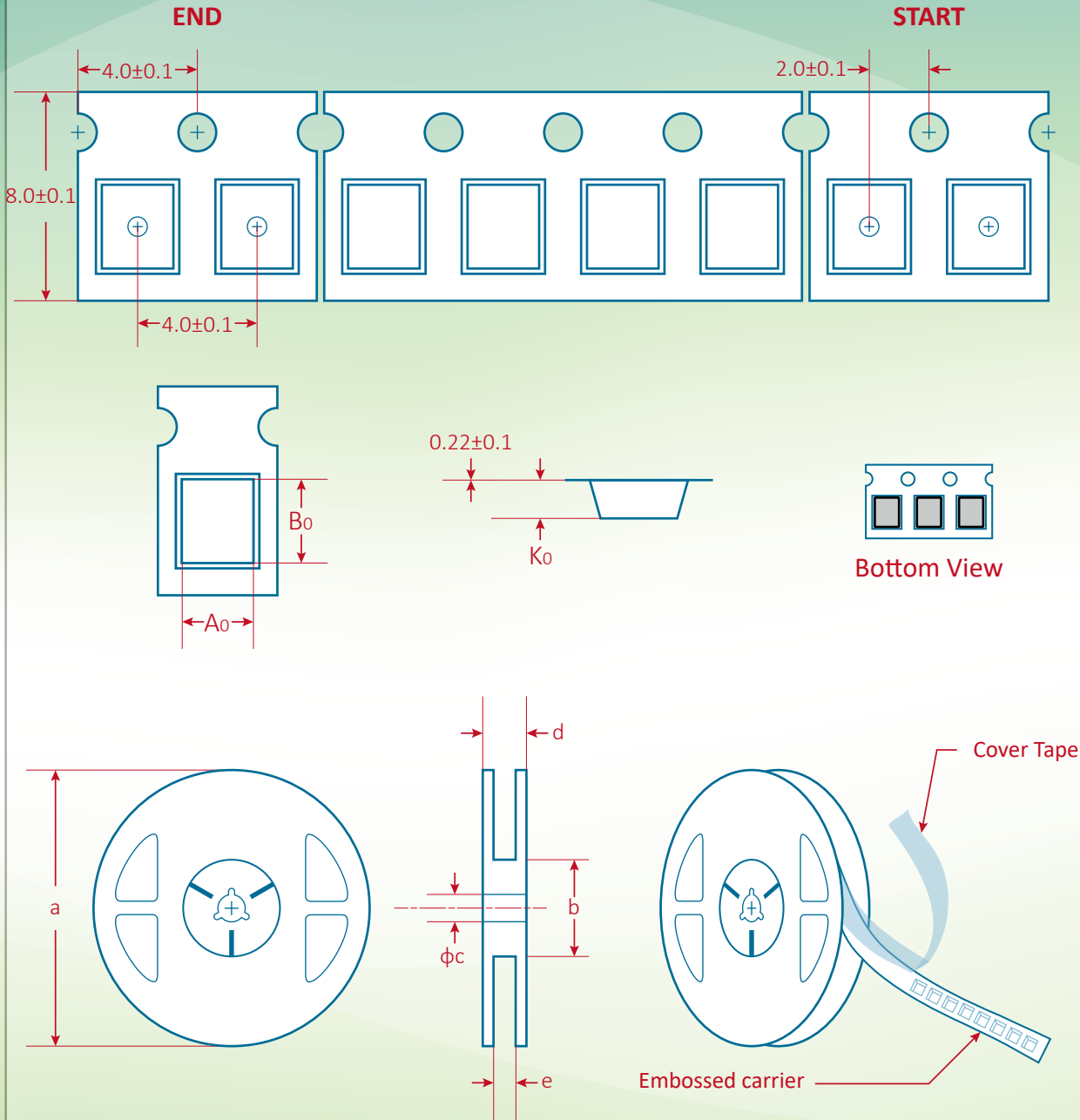
- Test Frequency : 1MHz
- L/Q/DCR : E4982A + Agilent 16197A



FSR03-MLT2

# Packing

Dimensions in mm



Item	A <sub>0</sub>	B <sub>0</sub>	K <sub>0</sub>	a	b	φ <sub>c</sub>	d	e
FSR03-MLT2	1.25±0.1	1.9±0.1	1.05±0.1	180	60	13	14.4	8.4
Reel								
Q'ty(Pcs)								
4,000								