



### FEATURES:

- Operating Temperature Range: -40 to +125°C
- Inductance Range: 0.10uH to 82uH
- High current rating from 1.5A-120.0A
- Shielded Low profile
- Low DCR ratings



### PART NUMBER STRUCTURE

FMPI Series	454121 Size	- R47 Inductance Value	M Tolerance	U Packaging
	252010	R47 = 0.47μH	M = ±20%	U = 13" Reel
	252012	4R7 = 4.7μH		
	454121	470 = 47μH		
	554720			
	554730			
	736620			
	736625			
	736630			
	736650			
	111040			
	131250			
	141340			
	141350			
	141365			

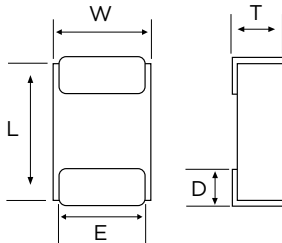
**Example P/N:** FMPI454121-R47MU

Standard termination finish is 100% matte Tin (Sn) over Nickel.

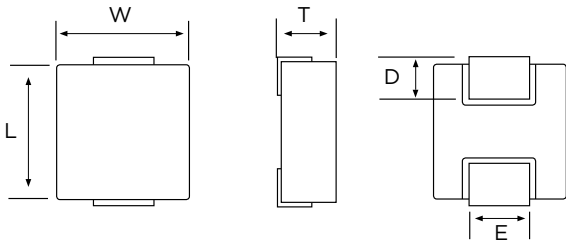
### DIMENSIONS

Unit: (mm)

#### SIZE 252010 and 252012:



#### ALL OTHER SIZES:



SIZE	L	W	T	E	D
252010	2.5±0.2	2.0±0.2	1.0 max	1.8±0.2	0.6±0.3
252012	2.5±0.2	2.0±0.2	1.2 max	1.5±0.5	0.6±0.2
454121	4.5±0.5	4.1±0.5	2.1 max	1.5±0.5	0.8±0.5
554720	5.5±0.5	4.7±0.5	2.0 max	1.5±0.5	1.2±0.5
554730	5.5±0.5	4.7±0.5	3.0 max	1.5±0.5	1.2±0.5
736620	7.3±0.3	6.6±0.2	2.0 max	2.9±0.5	1.6±0.5
736625	7.3±0.3	6.6±0.2	2.5 max	2.9±0.5	1.6±0.5
736630	7.3±0.3	6.6±0.2	3.0 max	2.9±0.5	1.6±0.5
736650	7.3±0.3	6.6±0.2	5.0 max	2.9±0.5	1.6±0.5
111040	11.2±0.3	10.1±0.3	4.0 max	2.9±0.5	2.0±0.5
131250	13.5±0.5	12.5±0.3	5.0 max	4.7±0.3	2.3±0.3
141340	13.9±0.3	12.7±0.3	4.0 max	3.8±0.5	2.3±0.5
141350	13.9±0.3	12.7±0.3	5.0 max	3.8±0.5	2.3±0.5
141365	13.9±0.3	12.7±0.3	6.5 max	3.8±0.5	2.3±0.5

### ELECTRICAL SPECIFICATION & RANGE

#### SIZE: 252010

INDUCTANCE (UH)	TOLERANCE	TEST CONDITION	DC RESISTANCE MAX (Ω)	ISAT (A) <sup>(1)</sup>	TEMPERATURE RISE CURRENT MAX <sup>(2)</sup> (A)	VENKEL PART NUMBER
0.33	±20%	1000KHz, 1.0V	0.022	7.0	4.8	FMPI252010-R33MT
0.47	±20%	1000KHz, 1.0V	0.029	6.0	4.4	FMPI252010-R47MT
1.0	±20%	1000KHz, 1.0V	0.052	4.0	3.6	FMPI252010-1R0MT
2.2	±20%	1000KHz, 1.0V	0.110	3.0	3.1	FMPI252010-2R2MT

#### SIZE: 252012

INDUCTANCE (UH)	TOLERANCE	TEST CONDITION	DC RESISTANCE MAX (Ω)	ISAT (A) <sup>(1)</sup>	TEMPERATURE RISE CURRENT MAX <sup>(2)</sup> (A)	VENKEL PART NUMBER
0.47	±20%	1000KHz, 1.0V	0.025	4.95	4.18	FMPI252012-R47MT
0.68	±20%	1000KHz, 1.0V	0.035	4.63	3.36	FMPI252012-R68MT
1.0	±20%	1000KHz, 1.0V	0.052	4.04	3.10	FMPI252012-1R0MT
1.5	±20%	1000KHz, 1.0V	0.077	2.91	2.27	FMPI252012-1R5MT
2.2	±20%	1000KHz, 1.0V	0.098	2.73	2.06	FMPI252012-2R2MT
3.3	±20%	1000KHz, 1.0V	0.150	1.80	1.80	FMPI252012-3R3MT
4.7	±20%	1000KHz, 1.0V	0.235	1.58	1.40	FMPI252012-4R7MT

#### SIZE: 454121

INDUCTANCE (UH)	TOLERANCE	TEST CONDITION	DC RESISTANCE MAX (Ω)	ISAT (A) <sup>(1)</sup>	TEMPERATURE RISE CURRENT MAX <sup>(2)</sup> (A)	VENKEL PART NUMBER
0.10	±20%	100KHz, 0.25V	0.004	22.0	12.0	FMPI454121-R10MU
0.22	±20%	100KHz, 0.25V	0.0066	12.5	9.0	FMPI454121-R22MU
0.47	±20%	100KHz, 0.25V	0.014	9.5	7.0	FMPI454121-R47MU
0.56	±20%	100KHz, 0.25V	0.016	8.5	6.5	FMPI454121-R56MU
1.0	±20%	100KHz, 0.25V	0.027	7.0	4.5	FMPI454121-1R0MU
1.5	±20%	100KHz, 0.25V	0.046	6.0	4.0	FMPI454121-1R5MU
2.2	±20%	100KHz, 0.25V	0.058	5.0	3.0	FMPI454121-2R2MU
3.3	±20%	100KHz, 0.25V	0.087	4.0	2.5	FMPI454121-3R3MU

#### SIZE: 554720

INDUCTANCE (UH)	TOLERANCE	TEST CONDITION	DC RESISTANCE MAX (Ω)	ISAT (A) <sup>(1)</sup>	TEMPERATURE RISE CURRENT MAX <sup>(2)</sup> (A)	VENKEL PART NUMBER
0.10	±20%	100KHz, 0.25V	0.0039	45.0	17.0	FMPI554720-R10MU
0.22	±20%	100KHz, 0.25V	0.0052	22.0	15.0	FMPI554720-R22MU
0.33	±20%	100KHz, 0.25V	0.0082	25.0	12.0	FMPI554720-R33MU
0.47	±20%	100KHz, 0.25V	0.0094	21.0	11.5	FMPI554720-R47MU
0.68	±20%	100KHz, 0.25V	0.0124	15.0	10.0	FMPI554720-R68MU
1.0	±20%	100KHz, 0.25V	0.020	16.0	7.0	FMPI554720-1R0MU
2.2	±20%	100KHz, 0.25V	0.0501	12.5	4.2	FMPI554720-2R2MU
3.3	±20%	100KHz, 0.25V	0.0855	8.5	3.3	FMPI554720-3R3MU
4.7	±20%	100KHz, 0.25V	0.1166	5.0	2.8	FMPI554720-4R7MU

(1) Saturation Current is the current that causes the inductance to drop by approximately 30%

(2) Temperature Rise Current is current that causes an approximate ΔT of 40°C

- All test data is referenced at 25°C ambient

### ELECTRICAL SPECIFICATION & RANGE

#### SIZE: 554730

INDUCTANCE (UH)	TOLERANCE	TEST CONDITION	DC RESISTANCE MAX (Ω)	ISAT (A) <sup>(1)</sup>	TEMPERATURE RISE CURRENT MAX <sup>(2)</sup> (A)	VENKEL PART NUMBER
0.10	±20%	100KHz, 0.25V	0.00316	27.0	23.0	FMPI554730-R10MU
0.22	±20%	100KHz, 0.25V	0.00452	21.0	15.5	FMPI554730-R22MU
0.33	±20%	100KHz, 0.25V	0.00556	19.0	13.7	FMPI554730-R33MU
0.47	±20%	100KHz, 0.25V	0.00704	16.0	12.2	FMPI554730-R47MU
0.68	±20%	100KHz, 0.25V	0.00896	13.5	10.2	FMPI554730-R68MU
0.82	±20%	100KHz, 0.25V	0.0119	13.0	9.3	FMPI554730-R82MU
1.0	±20%	100KHz, 0.25V	0.0137	12.0	9.2	FMPI554730-1R0MU
1.5	±20%	100KHz, 0.25V	0.0207	11.0	7.2	FMPI554730-1R5MU
2.2	±20%	100KHz, 0.25V	0.0292	10.0	5.8	FMPI554730-2R2MU
3.3	±20%	100KHz, 0.25V	0.0547	8.5	5.0	FMPI554730-3R3MU
4.7	±20%	100KHz, 0.25V	0.0775	8.2	3.5	FMPI554730-4R7MU

#### SIZE: 736620

INDUCTANCE (UH)	TOLERANCE	TEST CONDITION	DC RESISTANCE MAX (Ω)	ISAT (A) <sup>(1)</sup>	TEMPERATURE RISE CURRENT MAX <sup>(2)</sup> (A)	VENKEL PART NUMBER
0.10	±20%	100KHz, 0.25V	0.0035	40.0	18.0	FMPI736620-R10MU
0.15	±20%	100KHz, 0.25V	0.0052	38.0	15.0	FMPI736620-R15MU
0.22	±20%	100KHz, 0.25V	0.0057	26.0	14.0	FMPI736620-R22MU
0.33	±20%	100KHz, 0.25V	0.0070	18.0	12.0	FMPI736620-R33MU
0.47	±20%	100KHz, 0.25V	0.0093	18.0	11.0	FMPI736620-R47MU
0.68	±20%	100KHz, 0.25V	0.0139	17.0	9.0	FMPI736620-R68MU
0.82	±20%	100KHz, 0.25V	0.0159	17.0	8.0	FMPI736620-R82MU
1.0	±20%	100KHz, 0.25V	0.0183	14.0	7.0	FMPI736620-1R0MU
1.5	±20%	100KHz, 0.25V	0.0340	13.0	4.0	FMPI736620-1R5MU
2.2	±20%	100KHz, 0.25V	0.0460	11.5	3.75	FMPI736620-2R2MU
3.3	±20%	100KHz, 0.25V	0.0601	10.0	3.25	FMPI736620-3R3MU
4.7	±20%	100KHz, 0.25V	0.0780	8.0	3.0	FMPI736620-4R7MU

#### SIZE: 736625

INDUCTANCE (UH)	TOLERANCE	TEST CONDITION	DC RESISTANCE MAX (Ω)	ISAT (A) <sup>(1)</sup>	TEMPERATURE RISE CURRENT MAX <sup>(2)</sup> (A)	VENKEL PART NUMBER
0.10	±20%	100KHz, 0.25V	0.0017	50.0	30.0	FMPI736625-R10MU
0.22	±20%	100KHz, 0.25V	0.0032	34.0	21.0	FMPI736625-R22MU
0.33	±20%	100KHz, 0.25V	0.0041	22.0	18.0	FMPI736625-R33MU
0.47	±20%	100KHz, 0.25V	0.0065	21.0	13.5	FMPI736625-R47MU
0.68	±20%	100KHz, 0.25V	0.0094	18.0	11.0	FMPI736625-R68MU
0.82	±20%	100KHz, 0.25V	0.0118	17.0	10.0	FMPI736625-R82MU
1.0	±20%	100KHz, 0.25V	0.0142	16.0	9.0	FMPI736625-1R0MU
1.5	±20%	100KHz, 0.25V	0.0212	15.0	7.5	FMPI736625-1R5MU
2.2	±20%	100KHz, 0.25V	0.0340	14.0	6.5	FMPI736625-2R2MU
3.3	±20%	100KHz, 0.25V	0.0516	13.0	5.0	FMPI736625-3R3MU
4.7	±20%	100KHz, 0.25V	0.0630	10.0	4.5	FMPI736625-4R7MU
6.8	±20%	100KHz, 0.25V	0.0950	9.0	3.5	FMPI736625-6R8MU
8.2	±20%	100KHz, 0.25V	0.1060	8.0	3.0	FMPI736625-8R2MU
10	±20%	100KHz, 0.25V	0.1290	7.0	2.5	FMPI736625-100MU

(1) Saturation Current is the current that causes the inductance to drop by approximately 30%

(2) Temperature Rise Current is current that causes an approximate ΔT of 40°C

- All test data is referenced at 25°C ambient

### ELECTRICAL SPECIFICATION & RANGE

#### SIZE: 736630

INDUCTANCE (UH)	TOLERANCE	TEST CONDITION	DC RESISTANCE MAX (Ω)	ISAT (A) <sup>(1)</sup>	TEMPERATURE RISE CURRENT MAX <sup>(2)</sup> (A)	VENKEL PART NUMBER
0.10	±20%	100KHz, 0.25V	0.0017	60.0	32.5	FMPI736630-R10MU
0.22	±20%	100KHz, 0.25V	0.0028	40.0	23.0	FMPI736630-R22MU
0.33	±20%	100KHz, 0.25V	0.0039	30.0	20.0	FMPI736630-R33MU
0.47	±20%	100KHz, 0.25V	0.0042	26.0	17.5	FMPI736630-R47MU
0.68	±20%	100KHz, 0.25V	0.0055	25.0	15.5	FMPI736630-R68MU
0.82	±20%	100KHz, 0.25V	0.0080	24.0	13.0	FMPI736630-R82MU
1.0	±20%	100KHz, 0.25V	0.010	22.0	11.0	FMPI736630-R10MU
1.5	±20%	100KHz, 0.25V	0.0150	18.0	9.0	FMPI736630-R15MU
2.2	±20%	100KHz, 0.25V	0.020	14.0	8.0	FMPI736630-R22MU
3.3	±20%	100KHz, 0.25V	0.030	13.5	6.0	FMPI736630-R33MU
4.7	±20%	100KHz, 0.25V	0.040	10.0	5.5	FMPI736630-R47MU
6.8	±20%	100KHz, 0.25V	0.060	8.0	4.5	FMPI736630-R68MU
8.2	±20%	100KHz, 0.25V	0.068	7.5	4.0	FMPI736630-R82MU
10	±20%	100KHz, 0.25V	0.105	7.0	3.0	FMPI736630-R100MU

#### SIZE: 736650

INDUCTANCE (UH)	TOLERANCE	TEST CONDITION	DC RESISTANCE MAX (Ω)	ISAT (A) <sup>(1)</sup>	TEMPERATURE RISE CURRENT MAX <sup>(2)</sup> (A)	VENKEL PART NUMBER
0.56	±20%	100KHz, 0.25V	0.0036	12.0	20.0	FMPI736650-R56MU
0.68	±20%	100KHz, 0.25V	0.0045	11.5	18.0	FMPI736650-R68MU
0.82	±20%	100KHz, 0.25V	0.0049	13.0	16.5	FMPI736650-R82MU
1.0	±20%	100KHz, 0.25V	0.0065	15.0	13.0	FMPI736650-R100MU
1.5	±20%	100KHz, 0.25V	0.0090	12.0	12.0	FMPI736650-R15MU
2.2	±20%	100KHz, 0.25V	0.0136	10.0	10.0	FMPI736650-R22MU
3.3	±20%	100KHz, 0.25V	0.0209	8.0	8.0	FMPI736650-R33MU
4.7	±20%	100KHz, 0.25V	0.0303	7.0	6.5	FMPI736650-R47MU
5.6	±20%	100KHz, 0.25V	0.0344	7.0	6.0	FMPI736650-R56MU
6.8	±20%	100KHz, 0.25V	0.0446	5.5	5.5	FMPI736650-R68MU
8.2	±20%	100KHz, 0.25V	0.0507	5.0	5.0	FMPI736650-R82MU
10	±20%	100KHz, 0.25V	0.0713	4.5	4.5	FMPI736650-R100MU

#### SIZE: 111040

INDUCTANCE (UH)	TOLERANCE	TEST CONDITION	DC RESISTANCE MAX (Ω)	ISAT (A) <sup>(1)</sup>	TEMPERATURE RISE CURRENT MAX <sup>(2)</sup> (A)	VENKEL PART NUMBER
0.19	±20%	100KHz, 0.25V	0.00095	90.0	40.0	FMPI111040-R19MU
0.36	±20%	100KHz, 0.25V	0.0014	60.0	31.5	FMPI111040-R36MU
0.47	±20%	100KHz, 0.25V	0.0016	38.0	26.0	FMPI111040-R47MU
0.56	±20%	100KHz, 0.25V	0.0018	49.0	27.5	FMPI111040-R56MU
1.0	±20%	100KHz, 0.25V	0.0041	36.0	17.5	FMPI111040-R100MU
1.5	±20%	100KHz, 0.25V	0.0058	27.5	15.0	FMPI111040-R15MU
2.2	±20%	100KHz, 0.25V	0.009	25.6	12.0	FMPI111040-R22MU
3.3	±20%	100KHz, 0.25V	0.0118	18.6	10.0	FMPI111040-R33MU
4.7	±20%	100KHz, 0.25V	0.0165	17.0	9.5	FMPI111040-R47MU
5.6	±20%	100KHz, 0.25V	0.0193	16.0	8.5	FMPI111040-R56MU
6.8	±20%	100KHz, 0.25V	0.0233	13.5	8.0	FMPI111040-R68MU
10	±20%	100KHz, 0.25V	0.0365	12.0	6.8	FMPI111040-R100MU

(1) Saturation Current is the current that causes the inductance to drop by approximately 30%

(2) Temperature Rise Current is current that causes an approximate ΔT of 40°C

- All test data is referenced at 25°C ambient

### ELECTRICAL SPECIFICATION & RANGE

#### SIZE: 131250

INDUCTANCE (UH)	TOLERANCE	TEST CONDITION	DC RESISTANCE MAX (mΩ)	I RMS (A) TYPICAL	I RMS (A) MAX.	I SAT (A) TYPICAL	I SAT (A) MAX.	PART NUMBER
1.80	±20%	100KHz, 1.0V	4.90	21.00	19.00	40.00	37.00	FMPI131250-1R8MU
2.20	±20%	100KHz, 1.0V	5.50	20.00	18.00	32.00	29.00	FMPI131250-2R2MU
2.70	±20%	100KHz, 1.0V	6.70	17.00	15.00	32.00	29.00	FMPI131250-2R7MU
3.30	±20%	100KHz, 1.0V	9.20	15.00	13.00	32.00	29.00	FMPI131250-3R3MU
4.70	±20%	100KHz, 1.0V	15.00	12.00	10.50	27.00	25.00	FMPI131250-4R7MU
5.60	±20%	100KHz, 1.0V	16.50	11.50	10.00	22.00	20.00	FMPI131250-5R6MU
6.00	±20%	100KHz, 1.0V	16.50	11.50	10.00	21.50	20.00	FMPI131250-6R0MU
6.80	±20%	100KHz, 1.0V	18.50	11.00	9.50	21.00	19.50	FMPI131250-6R8MU
8.20	±20%	100KHz, 1.0V	22.50	9.50	8.50	18.00	16.50	FMPI131250-8R2MU
10.00	±20%	100KHz, 1.0V	25.50	9.00	8.00	16.00	14.50	FMPI131250-100MU
12.00	±20%	100KHz, 1.0V	34.00	8.60	7.60	15.00	14.00	FMPI131250-120MU
15.00	±20%	100KHz, 1.0V	38.00	8.20	7.20	13.00	12.00	FMPI131250-150MU
18.00	±20%	100KHz, 1.0V	45.00	7.50	6.50	11.00	10.00	FMPI131250-180MU
22.00	±20%	100KHz, 1.0V	58.00	6.50	6.00	10.00	9.00	FMPI131250-220MU
27.00	±20%	100KHz, 1.0V	76.00	5.20	4.70	8.50	7.80	FMPI131250-270MU
33.00	±20%	100KHz, 1.0V	88.00	5.00	4.50	8.00	7.30	FMPI131250-330MU
39.00	±20%	100KHz, 1.0V	100.00	4.70	4.30	7.50	7.00	FMPI131250-390MU
68.00	±20%	100KHz, 1.0V	162.00	3.50	3.10	5.50	5.00	FMPI131250-680MU
82.00	±20%	100KHz, 1.0V	238.00	3.00	2.60	4.80	4.30	FMPI131250-820MU

(1) Saturation Current is the current that causes the inductance to drop by approximately 30%

(2) Temperature Rise Current is current that causes an approximate ΔT of 40°C

- All test data is referenced at 25°C ambient

### ELECTRICAL SPECIFICATION & RANGE

#### SIZE: 141340

INDUCTANCE (UH)	TOLERANCE	TEST CONDITION	DC RESISTANCE MAX (Ω)	ISAT (A) <sup>(1)</sup>	TEMPERATURE RISE CURRENT MAX <sup>(2)</sup> (A)	VENKEL PART NUMBER
0.10	±20%	100KHz, 0.25V	0.00096	84.0	43.0	FMPI141340-R10MU
0.15	±20%	100KHz, 0.25V	0.0012	75.0	41.0	FMPI141340-R15MU
0.22	±20%	100KHz, 0.25V	0.0013	65.0	38.5	FMPI141340-R22MU
0.33	±20%	100KHz, 0.25V	0.0015	62.0	36.5	FMPI141340-R33MU
0.47	±20%	100KHz, 0.25V	0.002	55.0	32.0	FMPI141340-R47MU
0.60	±20%	100KHz, 0.25V	0.0022	51.0	29.0	FMPI141340-R60MU
0.68	±20%	100KHz, 0.25V	0.0025	49.0	28.0	FMPI141340-R68MU
0.82	±20%	100KHz, 0.25V	0.003	44.0	25.0	FMPI141340-R82MU
1.0	±20%	100KHz, 0.25V	0.0035	40.0	24.0	FMPI141340-1R0MU
1.5	±20%	100KHz, 0.25V	0.0055	35.0	19.0	FMPI141340-1R5MU
1.8	±20%	100KHz, 0.25V	0.007	30.0	16.5	FMPI141340-1R8MU
2.2	±20%	100KHz, 0.25V	0.008	29.0	16.0	FMPI141340-2R2MU
3.3	±20%	100KHz, 0.25V	0.012	27.0	12.0	FMPI141340-3R3MU
4.7	±20%	100KHz, 0.25V	0.015	24.0	10.0	FMPI141340-4R7MU
5.6	±20%	100KHz, 0.25V	0.019	19.0	9.5	FMPI141340-5R6MU
6.8	±20%	100KHz, 0.25V	0.022	18.0	9.0	FMPI141340-6R8MU
8.2	±20%	100KHz, 0.25V	0.028	16.0	8.5	FMPI141340-8R2MU
10	±20%	100KHz, 0.25V	0.034	14.0	7.0	FMPI141340-100MU

#### SIZE: 141350

INDUCTANCE (UH)	TOLERANCE	TEST CONDITION	DC RESISTANCE MAX (Ω)	ISAT (A) <sup>(1)</sup>	TEMPERATURE RISE CURRENT MAX <sup>(2)</sup> (A)	VENKEL PART NUMBER
0.10	±20%	100KHz, 0.25V	0.0006	118.0	55.0	FMPI141350-R10MU
0.22	±20%	100KHz, 0.25V	0.0008	110.0	51.0	FMPI141350-R22MU
0.33	±20%	100KHz, 0.25V	0.0011	80.0	42.0	FMPI141350-R33MU
0.47	±20%	100KHz, 0.25V	0.0013	65.0	38.0	FMPI141350-R47MU
0.56	±20%	100KHz, 0.25V	0.0015	55.0	36.0	FMPI141350-R56MU
0.68	±20%	100KHz, 0.25V	0.0017	54.0	34.0	FMPI141350-R68MU
0.82	±20%	100KHz, 0.25V	0.0023	53.0	31.0	FMPI141350-R82MU
1.0	±20%	100KHz, 0.25V	0.0025	50.0	29.0	FMPI141350-1R0MU
1.5	±20%	100KHz, 0.25V	0.0041	48.0	23.0	FMPI141350-1R5MU
1.8	±20%	100KHz, 0.25V	0.0049	40.0	19.0	FMPI141350-1R8MU
2.2	±20%	100KHz, 0.25V	0.0055	32.0	20.0	FMPI141350-2R2MU
3.3	±20%	100KHz, 0.25V	0.0092	32.0	15.0	FMPI141350-3R3MU
4.7	±20%	100KHz, 0.25V	0.015	27.0	12.0	FMPI141350-4R7MU
5.6	±20%	100KHz, 0.25V	0.0165	22.0	11.5	FMPI141350-5R6MU
6.8	±20%	100KHz, 0.25V	0.0185	21.0	11.0	FMPI141350-6R8MU
7.8	±20%	100KHz, 0.25V	0.0205	18.0	10.0	FMPI141350-7R8MU
8.2	±20%	100KHz, 0.25V	0.0225	18.0	9.5	FMPI141350-8R2MU
10	±20%	100KHz, 0.25V	0.0255	16.0	9.0	FMPI141350-100MU

(1) Saturation Current is the current that causes the inductance to drop by approximately 30%

(2) Temperature Rise Current is current that causes an approximate ΔT of 40°C

- All test data is referenced at 25°C ambient

### ELECTRICAL SPECIFICATION & RANGE

#### SIZE: 141365

INDUCTANCE (UH)	TOLERANCE	TEST CONDITION	DC RESISTANCE MAX (Ω)	ISAT (A) <sup>(1)</sup>	TEMPERATURE RISE CURRENT MAX <sup>(2)</sup> (A)	VENKEL PART NUMBER
0.10	±20%	100KHz, 0.25V	0.0005	120.0	60.0	FMPI141365-R10MU
0.15	±20%	100KHz, 0.25V	0.0006	118.0	55.0	FMPI141365-R15MU
0.22	±20%	100KHz, 0.25V	0.0007	112.0	53.0	FMPI141365-R22MU
0.30	±20%	100KHz, 0.25V	0.0008	72.0	48.0	FMPI141365-R30MU
0.33	±20%	100KHz, 0.25V	0.0009	65.0	46.0	FMPI141365-R33MU
0.40	±20%	100KHz, 0.25V	0.001	64.0	44.0	FMPI141365-R40MU
0.47	±20%	100KHz, 0.25V	0.0012	63.0	41.0	FMPI141365-R47MU
0.56	±20%	100KHz, 0.25V	0.0014	62.0	37.0	FMPI141365-R56MU
0.68	±20%	100KHz, 0.25V	0.0016	60.0	35.0	FMPI141365-R68MU
0.82	±20%	100KHz, 0.25V	0.0019	50.0	33.0	FMPI141365-R82MU
1.0	±20%	100KHz, 0.25V	0.002	49.0	32.0	FMPI141365-R10MU
1.2	±20%	100KHz, 0.25V	0.0025	48.0	30.0	FMPI141365-R12MU
1.5	±20%	100KHz, 0.25V	0.003	45.0	27.0	FMPI141365-R15MU
1.8	±20%	100KHz, 0.25V	0.0032	41.0	24.0	FMPI141365-R18MU
2.2	±20%	100KHz, 0.25V	0.0042	40.0	22.0	FMPI141365-R22MU
3.3	±20%	100KHz, 0.25V	0.0068	35.0	18.0	FMPI141365-R33MU
4.7	±20%	100KHz, 0.25V	0.0087	32.0	13.5	FMPI141365-R47MU
5.6	±20%	100KHz, 0.25V	0.010	32.0	13.5	FMPI141365-R56MU
6.8	±20%	100KHz, 0.25V	0.014	16.5	11.5	FMPI141365-R68MU
8.2	±20%	100KHz, 0.25V	0.0155	16.0	10.5	FMPI141365-R82MU
10	±20%	100KHz, 0.25V	0.0172	15.5	10.0	FMPI141365-R100MU

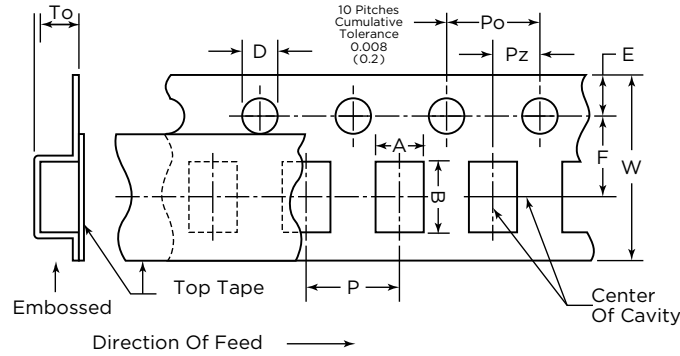
(1) Saturation Current is the current that causes the inductance to drop by approximately 30%

(2) Temperature Rise Current is current that causes an approximate ΔT of 40°C

- All test data is referenced at 25°C ambient

### TAPE & REEL SPECIFICATIONS

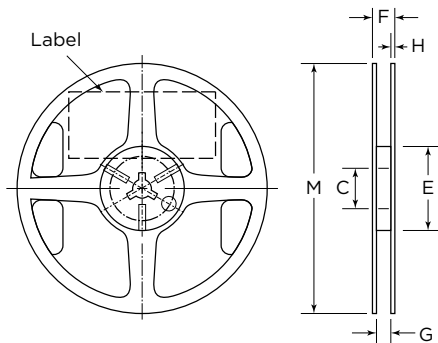
#### TAPE



Unit: mm

SIZE	252010	252012	454121	554720	554730	736620	736625	736630	736650	111040	141340	141350	141365
Tape	Embossed Tape	Embossed Tape	Embossed Tape	Embossed Tape	Embossed Tape	Embossed Tape	Embossed Tape	Embossed Tape	Embossed Tape	Embossed Tape	Embossed Tape	Embossed Tape	Embossed Tape
A	2.25±0.1	2.74±0.1	4.80±0.1	5.75±0.1	5.75±0.1	7.2±0.10	7.2±0.10	7.2±0.10	7.2±0.10	10.3±0.1	12.8±0.1	12.8±0.1	12.8±0.1
B	2.80±0.1	2.27±0.1	4.40±0.1	5.30±0.1	5.30±0.1	7.0±0.10	7.0±0.10	7.0±0.10	7.0±0.10	11.2±0.1	13.8±0.1	13.8±0.1	13.8±0.1
W	8.00±0.1	8.00±0.1	12.00±0.1	12.00±0.10	12.00±0.10	16.00±0.10	16.00±0.10	16.00±0.10	16.00±0.10	24.00±0.10	24.00±0.10	24.00±0.10	24.00±0.10
F	3.50±0.1	3.50±0.1	5.50±0.1	5.50±0.10	5.50±0.10	7.50±0.10	7.50±0.10	7.50±0.10	7.50±0.10	11.5±0.1	11.5±0.1	11.5±0.1	11.5±0.1
E	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.10	1.75±0.10	1.80±0.10	1.80±0.10	1.80±0.10	1.80±0.10	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1
Po	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Pz	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
D	2.00	2.00	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
TO	1.35±0.1	1.40	2.10±0.1	2.1±0.1	3.1±0.1	3.60±0.15	3.60±0.15	3.60±0.15	3.60±0.15	4.1±0.15	3.6±0.15	5.1±0.15	6.6±0.15
P	4.00	4.00	8.00	8.00	8.00	12.00	12.00	12.00	12.00	16.00	16.00	16.00	16.00
Qty/Reel	3,000	3,000	3,500	3,000	2,500	2,000	2,000	1,500	800	1,000	1,000	500	500

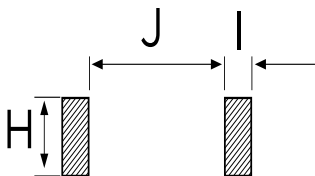
#### REEL



Unit: mm (inch)

TAPE WIDTH	12MM	16MM	24MM
M	330	330	330
C	13.0	13.0	13.0
E	100.0	100.0	100.00
H	1.5	2.0	2.0
G	11.9	16.5	24.5
F	18.4	18.5	29.1

#### LAND PATTERN



Unit: mm

SIZE	252010	252012	454121	554720	554730	736620	736625	736630	736650	111040	141340	141350	141365
H	2.0	2.0	2.2	2.5	2.5	3.5	3.5	3.5	3.5	4.0	5.0	5.0	5.0
I	0.8	1.0	1.5	2.0	2.0	2.5	2.5	2.5	2.5	3.5	2.9	2.9	2.9
J	1.2	1.2	2.5	3.0	3.0	3.7	3.7	3.7	3.7	6.0	7.9	7.9	7.9



### ENVIRONMENTAL CHARACTERISTICS

TEST	REQUIREMENT	TEST METHOD															
Solderability	95% min. coverage	230±5°C for 4±1 seconds															
Solder Heat Resistance	Inductance within±20% of initial value No disconnection or short circuit The appearance shall not break	260±5°C for 10±1 seconds															
Heat Resistance		Temperature: 125±5°C Time: 500 hours Tested after 2 hour at room temperature															
Cold Resistance		Temperature: -40±5°C Time: 500 hours Tested after 2 hour at room temperature															
Thermal Shock		One cycle: <table border="1"> <thead> <tr> <th>Step</th> <th>Temperature (°C)</th> <th>Time (min.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-40±5°C</td> <td>30</td> </tr> <tr> <td>2</td> <td>Room temperature</td> <td>3</td> </tr> <tr> <td>3</td> <td>125±5°C</td> <td>30</td> </tr> <tr> <td>4</td> <td>Room temperature</td> <td>3</td> </tr> </tbody> </table>	Step	Temperature (°C)	Time (min.)	1	-40±5°C	30	2	Room temperature	3	3	125±5°C	30	4	Room temperature	3
Step		Temperature (°C)	Time (min.)														
1		-40±5°C	30														
2	Room temperature	3															
3	125±5°C	30															
4	Room temperature	3															
Humidity Resistance	Temperature: 40±2°C, 90-95% relative humidity Time: 500 hours Tested after 2 hour at room temperature																
Vibration Test	Inductance within±5% of initial value The appearance shall not break	After vibration for 1hour, in each of three orientations at sweep vibration (10-55-10Hz) with 1.52mm P-P amplitudes															