

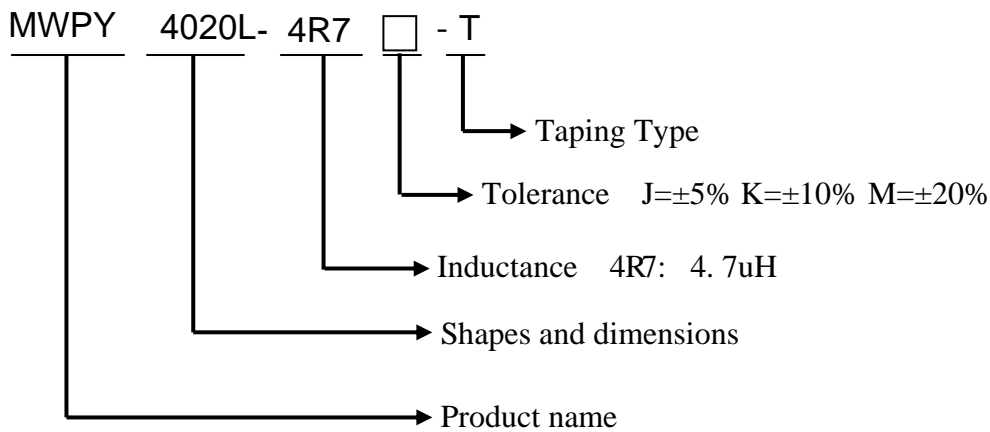
FEATURES

- 1、Low profile construction and miniature size
- 2、Magnetic shielded construction .
- 3、High current saturation.
- 4、For new generation portable product D/D converter unit.

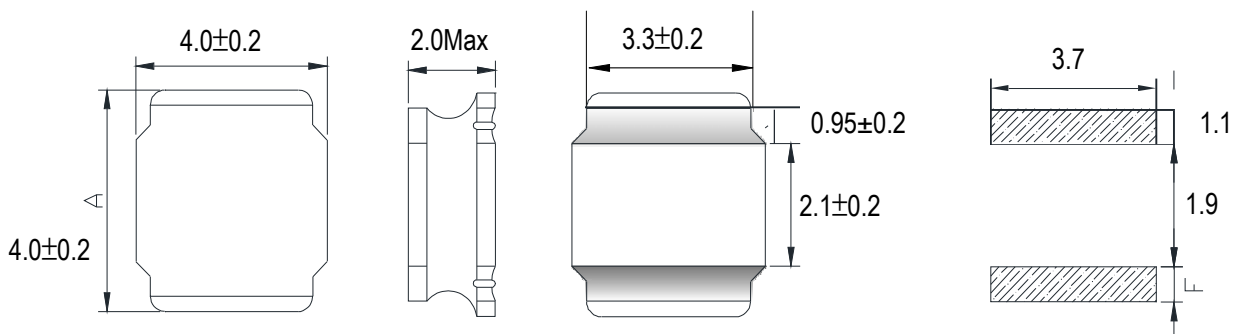
APPLICATIONS

DVD、Set-Top Box、DSC PDA、LCD display Cellular phones, HDD, etc.

PRODUCT IDENTIFICATION



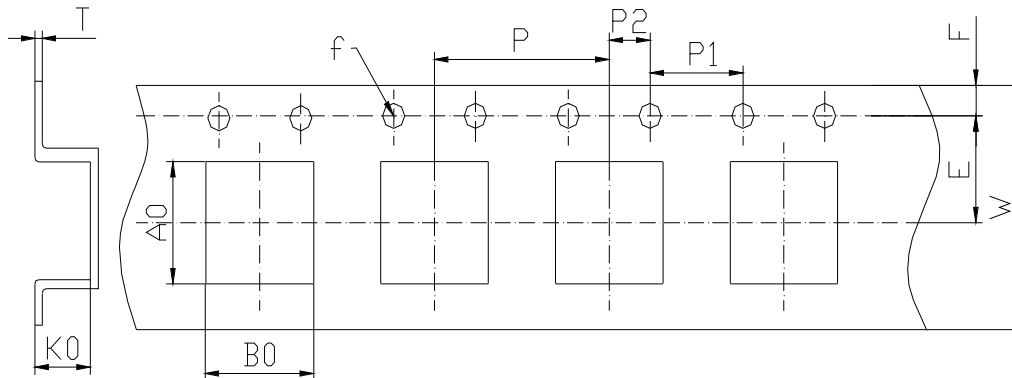
SHAPES AND DIMENSIONS(Unit:mm)



ELECTRICAL CHARACTERISTICS

PART NUMBER	INDUCTANCE (μ H)	RDC ($m\Omega$)		Isat (A)		Irms (A)		TOLERANCE
		Typ.	Max	Typ.	Max	Typ.	Max	
MWPY4020L-R47M-T	0.47	11	14	15.6	13.5	7.50	6.40	N : 30 % M : 20 %
MWPY4020L-R68M-T	0.68	19	23	11.2	8.75	7.45	6.45	
MWPY4020L-1R0M-T	1.0	22	27	10.5	8.20	6.70	5.71	
MWPY4020L-1R5M-T	1.5	29	37	9.65	7.75	6.02	5.22	
MWPY4020L-2R2M-T	2.2	39	48	7.63	6.12	5.05	4.35	
MWPY4020L-3R3M-T	3.3	60	73	5.93	4.65	4.01	3.47	
MWPY4020L-4R7M-T	4.7	89	108	4.95	4.02	3.28	2.83	
MWPY4020L-100M-T	10.0	180	217	3.53	2.81	2.32	1.98	

1. Test Frequency : 1MHz / 0.1 V
2. Test equipment :
L/Q : HP-4286A
SRF : HP-4291B , HP4287A
RDC: HP-4286A , CH16502
3. Isat : Based on Inductance decrease 30%
4. Irms : Based on Temperature increase 40°C
5. Operating temperature range: -40 to +125°C (Including self-temperature rise)
6. Storage Temp.: -40°C TO+85°C

PACKAGING AND DIMENSIONS


SIZE	A0	B0	E	F	f	P	P1	P2	W	T	K0
MWPY2010	2.65	2.65	5.50	1.75	1.50	4.00	4.00	2.00	8.00	0.25	1.25
MWPY2510	2.73	2.23	5.50	1.75	1.50	4.00	4.00	2.00	8.00	0.25	1.30
MWPY2512	2.73	2.23	5.50	1.75	1.50	4.00	4.00	2.00	8.00	0.25	1.50
MWPY3010	3.25	3.25	5.50	1.75	1.50	4.00	4.00	2.00	8.00	0.25	1.25
MWPY3012	3.25	3.25	5.50	1.75	1.50	4.00	4.00	2.00	8.00	0.25	1.45
MWPY3015	3.25	3.25	5.50	1.75	1.50	4.00	4.00	2.00	8.00	0.25	1.75
MWPY4010	4.30	4.30	5.50	1.75	1.50	8.00	4.00	2.00	12.00	0.25	1.25
MWPY4012	4.30	4.30	5.50	1.75	1.50	8.00	4.00	2.00	12.00	0.25	1.45
MWPY4018	4.30	4.30	5.50	1.75	1.50	8.00	4.00	2.00	12.00	0.25	2.05
MWPY4020	4.30	4.30	5.50	1.75	1.50	8.00	4.00	2.00	12.00	0.30	2.25
MWPY4030	4.50	4.50	5.50	1.75	1.5	8.00	4.00	2.00	12.00	0.30	3.20
MWPY5020	5.40	5.40	5.50	1.75	1.50	8.00	4.00	2.00	12.00	0.25	2.25
MWPY5040	5.40	5.40	5.50	1.75	1.50	8.00	4.00	2.00	12.00	0.25	4.25
MWPY6020	6.40	6.40	5.50	1.75	1.50	8.00	4.00	2.00	16.00	0.25	2.25
MWPY6028	6.40	6.40	5.50	1.75	1.50	8.00	4.00	2.00	16.00	0.25	3.05
MWPY6045	6.40	6.40	5.50	1.75	1.50	8.00	4.00	2.00	16.00	0.25	4.75
MWPY8040	8.20	8.40	5.50	1.75	1.50	12.00	4.00	2.00	16.00	0.25	4.25

Reel	
Q'ty(Pcs)	Size m/m
3,000	330 ϕ

Reliability test :

NO	Test item	Specification	Test condition	
1-1	High Temperature Exposure	1. No mechanical and electrical damage. 2. Inductance shall not change more than $\pm 20\%$.	1. Temperature: 125°C. 2. Time: 96 hours.	
1-2	Temperature Cycling		1. Temperature: -40°C ~ +125°C. 2. Cycles: 96. 3. Dwell time: 30 minutes.	
1-3	Biased Humidity		1. Temperature: 85°C. 2. Humidity: 85%RH. 3. Time: 96 hours.	
1-4	Operational Life		1. Temperature: 125°C (Temp. rise included.). 2. Time: 96 hours.	
1-5	Vibration Test		1. Frequency: 10-2000-10 Hz 2. Test duration: 2 hours for each direction, 6 hours in total. 3. Direction: X, Y, Z	
1-6	Resistance To Soldering Heat Test		1. Method: DIP 2. Temperature: 260 \pm 5 3. Time ($\geq 260^\circ\text{C}$): 10 Second 4. Number of times: 3	
1-7	Over Load		Applied double current of Isat to inductor for a period of 5 minutes.	
1-8	Solderability Test		The terminal shall be at least 95% covered with fresh solder.	Dip pads in flux then dip in solder pot at 240 \pm 5 for 5 seconds.
1-9	Withstanding Voltage Test		1. During the test no breakdown. 2. The characteristic is normal after test.	1. DV: 500V 2. Time: 1 minutes
1-10	Terminal Strength Test		Terminals to withstand the pull of at least want to 1.0 kgf.	1. Pull ≥ 1.0 kgf. 2. Dwell time: 1 minutes

Recommended Lead-Free IR Reflow Conditions :

