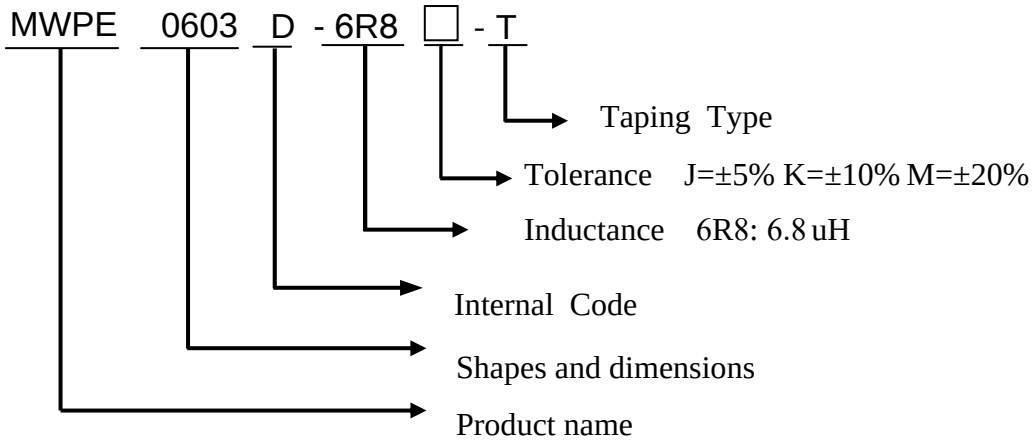
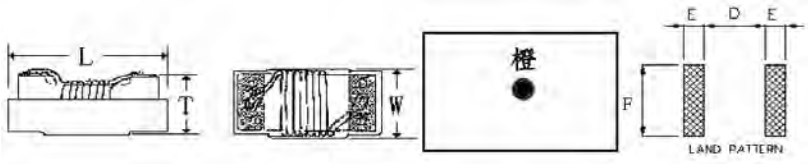
1. Scope

This specification applies wire wound power inductors MWPE0603D-6R8K-T to be delivered to user.

2. Product Identification

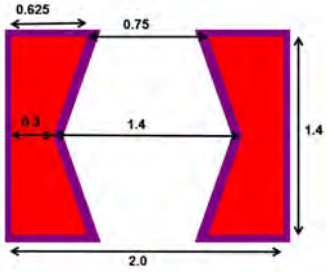


3. Shapes and Dimensions



CODE	L	W	T	E	F	D	
DIMENSION	1.80MAX	1.12MAX	0.95MAX	0.64Typ.	1.02Typ.	0.64Typ.	

paste mask layer recommendation:



4. Test Instruments

ITEM	SPEC. RANGE	TEST CONDITION	TEST INSTRUMENTS
L (μH)	6.80±10%	1MHz	HP4286A
Q(品质系数)	8 MIN	1MHz	
DCR (Ω)	2.13 MAX		502BC
Irms (mA)	200 MAX		VR116+VR7210
SRF (MHz)	50 MIN		E5071C ENA

a. Storage temp.: -40℃ ~ +85℃,R.H.: 30% ~ 70%,Operating temp.: -40℃ ~ +85℃

b. Moisture sensitivity level (MSL) 2 (1 year floor life at ＜30℃/85% relative humidity).

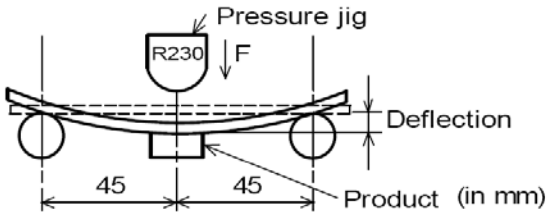
c. Failures in time(FIT)/Mean Time Between Failures(MTBF) 38 per billion hours/26,315,789 hours,calculated per Telcordia SR-332.

5. Test Data For Sample

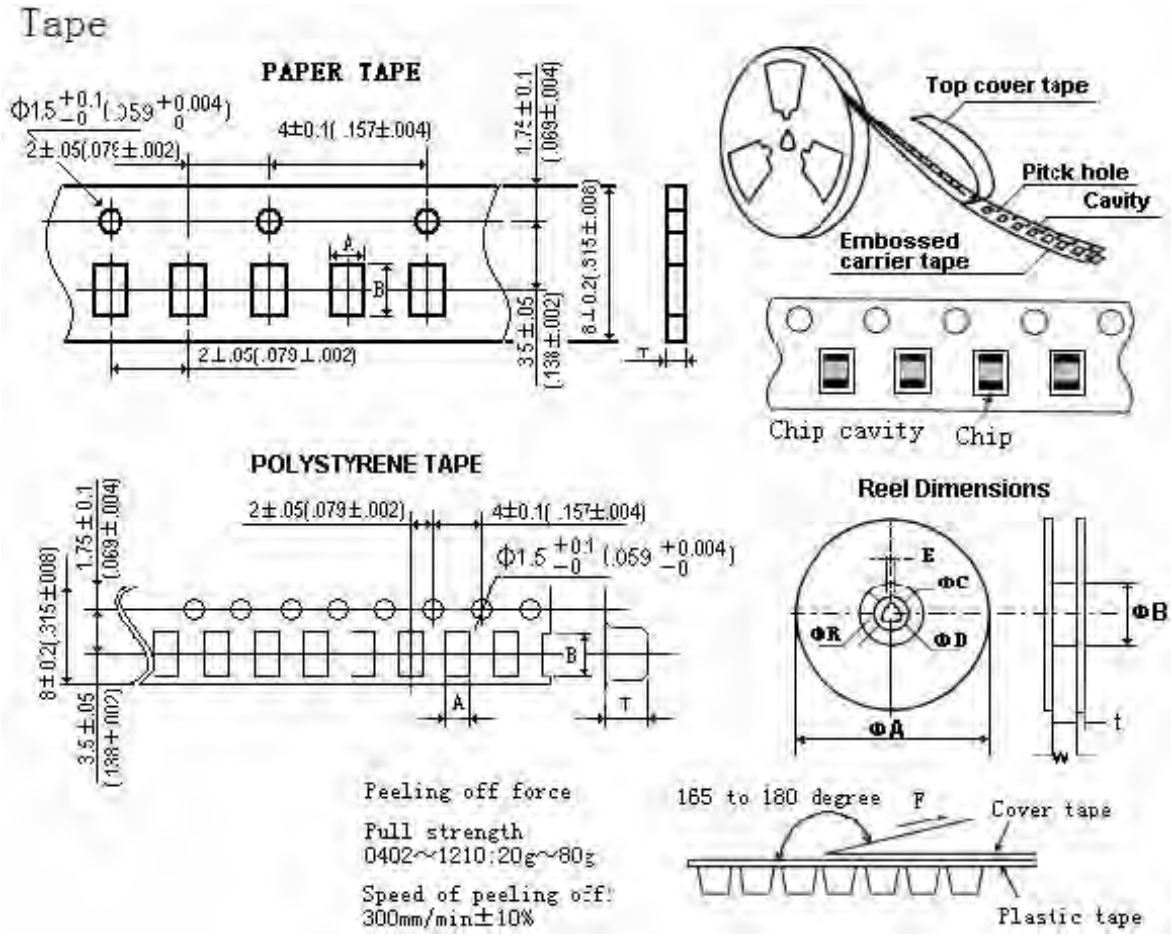
TEST ITEM	L	Q(品质系数)	DCR	L	W	T	
	(μH)	(min)	(Ω)	(mm)	(mm)	(mm)	
CON.	1MHz	1MHz	At 25℃	1.80MAX	1.25MAX	1.20MAX	
SPEC.	6.80±10%	8 MIN	2.13 MAX				
1	6.80	13.0	1.50	1.70	1.17	1.12	
2	6.77	11.0	1.52	1.72	1.16	1.11	
3	6.80	13.0	1.50	1.69	1.17	1.13	
4	6.82	11.0	1.50	1.71	1.15	1.11	
5	6.79	11.0	1.50	1.70	1.16	1.13	
6	6.83	12.0	1.52	1.69	1.15	1.11	
7	6.79	11.0	1.50	1.72	1.17	1.12	
8	6.79	12.0	1.51	1.70	1.16	1.13	
9	6.78	13.0	1.52	1.69	1.17	1.12	
10	6.81	11.0	1.51	1.72	1.16	1.11	
X	6.80	11.80	1.51	1.70	1.16	1.12	
R	0.06	2.00	0.02	0.03	0.02	0.02	

7. Reliability Test

TEST ITEM	SPECIFICATION	TEST CONDITION
Rating current	According to product specifications	Current sources:33010D
Inductance	According to product specifications	Test Frequency:0.252~250MHz Test Equipment:HP4291A ,HP4286A ,HP4287A HP4284A Test Fixture:16193Aor16334A
Q	According to product specifications	Test Frequency:0.252~1500MHz Test Equipment:HP4291A,HP4286A,HP4287A, Test Fixture:16193A or 16334A
RDC	According to product specifications	Test Equipment:HP4263B
SRF	According to product specifications	Test Equipment:HP4291A Test Fixture:16193A
Solderability	The metalized area must have more then 90%of solder cove-rage	Soldering Temp:230±5℃ Dipping time:5±1S
Resistance to soldering heat	No evidence of mechanical damage, The mealized arer must have more then 75% of solder coverage . Inductance change less than ±5% Q ch-ange less than ±10% .	Soldering Temp:260±5℃ Dipping time:10±1S
Thermal Shock	No evidence of mechanical damage,Inductance change less than±5%, Q change less than±10%	A cycle contain: Step 1: -40℃,30Min Step 2: 85℃, 30Min Cycle Times:10

TEST ITEM	SPECIFICATION	TEST CONDITION
High Temperature Storage	No evidence of mechanical damage, Inductance change less than±5%, Q change less than±10%	Test Temperature:125±2℃ (Ceramic core)85±2℃ (Ferrite core) Test Time:96±2Hours
Low Temperature Storage	No evidence of mechanical damage, Inductance change less than±5%, Q change less than±10%	Test Temperature:-40±2℃ Test Time:96±2Hours
Moisture Resistance	No evidence of mechanical damage, Inductance change less than±5%, Q change less than±10%	Test Temperature:50±2℃ Test Time:100Hours relative humidity:90~95%
Vibration	No evidence of mechanical damage, Inductance change less than±5%, Q change less than±10%	Amplitude:1.5mm X Y、Z each direction for 1Hour and 45min Frequency range:10~55~10Hz(min)
Component Adhesion	No evidence of mechanical damage， No evidence of peel off or broken，keep coutinuity of Winding	Force:2Kg Test Time:5±1sec
Resistance to bend	No evidence of mechanical damage	Camber:20mm Test Board:Glass-Epoxy board Thickness:8mm 
Life	No evidence of mechanical damage, Inductance change less than±5%,Q change less than±10%	Test Temperature:85±2℃ Test Time:1000Hours with rating current

8. Packaging



		A	B	T
膠帶	0603	1.15	1.83	0.95

unit	ΦA	ΦB	ΦC	ΦD	E	W	t	R
mm	178	60	13	21	2	8.4	2	1

包装数量(PACKAGING QUANTITY)

规格	0603
數量	4000

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