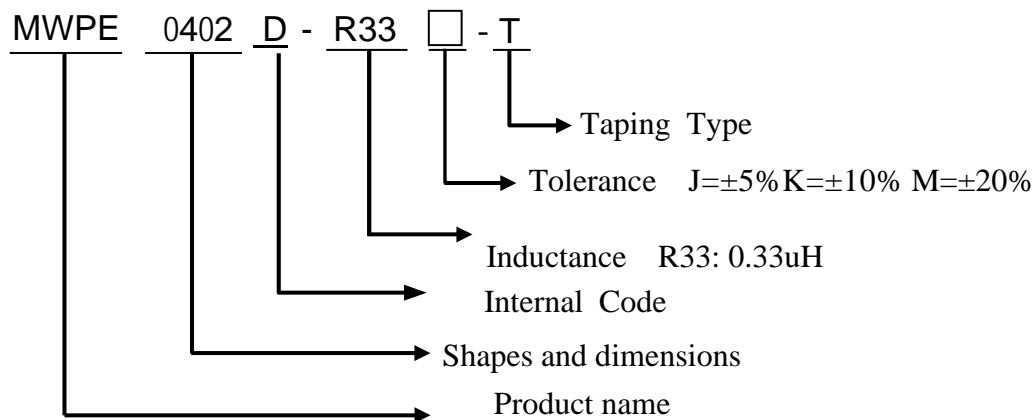


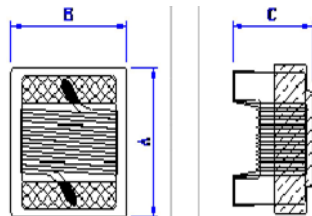
## 1. Scope

This specification applies wire wound power inductors MWPE0402D-R33J-T to be delivered to user.

## 2. Product Identification



## 3. Shapes and Dimensions



Unit: mm

A	B	C
1.19 Max	0.66 Max	0.64 Max

## 4. Electrical Characteristics

Customer Part Number	Our Product Part Number	Inductance (uH)/MHz	Inductance Tolerance	SRF min. (MHz)	RDC max ( Ω )	RMS max. (mA)
	MWPE0402D-R33J-T	0.33/7.9	J	820	0.56	350
			K			
			M			

## 5. Test Instruments

ITEM	SPEC. RANGE	TEST FREQ.	TEST INSTRUMENTS
L (μH)	0.33±5%	7.9MHz	HP4286A
DCR (Ω)	0.56MAX		502BC
Irms (mA)	350MAX		VR116+VR7210
SRF (MHz)	820 MIN		E5071C ENA

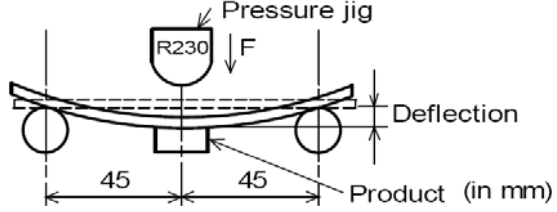
- a. Storage temp.: -40°C ~ +85°C, R.H.: 30% ~ 70%, Operating temp.: -40°C ~ +85°C
- b. Moisture sensitivity level (MSL) 2 (1 year floor life at < 30°C/85% relative humidity).
- c. Failures in time(FIT)/Mean Time Between Failures(MTBF) 38 per billion hours/26,315,789 hours, calculated per Telcordia SR-332.

**6.TEST DATA FOR SAMPL**

TEST ITEM	L	DCR	A	B	C
	( $\mu$ H)	( $\Omega$ )	(mm)	(mm)	(mm)
CON.	7.9MHz/0.5V	At 25°C			
SPEC.	0.33 $\pm$ 5%	0.56 MAX	1.19MAX	0.66MAX	0.64MAX
1	0.32	0.52	1.16	0.64	0.56
2	0.314	0.55	1.15	0.63	0.64
3	0.325	0.54	1.17	0.63	0.56
4	0.334	0.53	1.16	0.64	0.64
5	0.339	0.53	1.16	0.65	0.54
6	0.321	0.56	1.15	0.64	0.55
7	0.345	0.55	1.17	0.65	0.56
8	0.316	0.53	1.17	0.63	0.64
9	0.339	0.55	1.16	0.64	0.55
10	0.346	0.54	1.17	0.64	0.56
X	0.3299	0.54	1.162	0.639	0.58
R	0.032	0.04	0.02	0.02	0.1

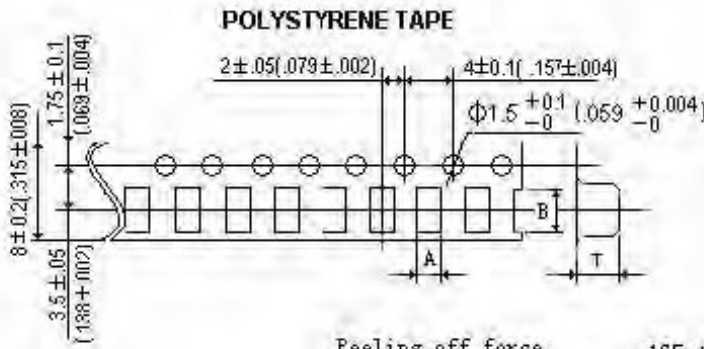
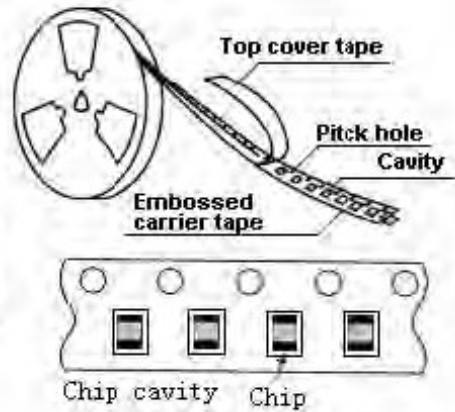
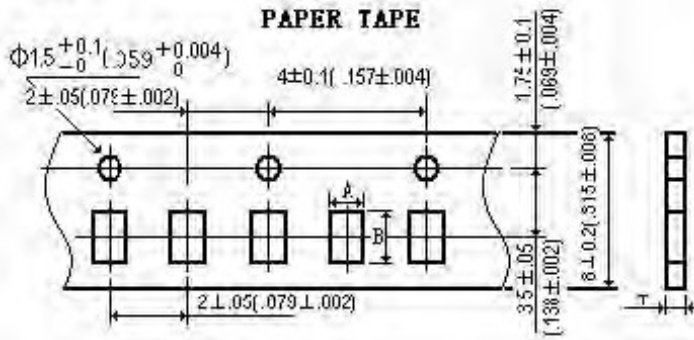
## 7. Reliability Test

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
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 coverage	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 change 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

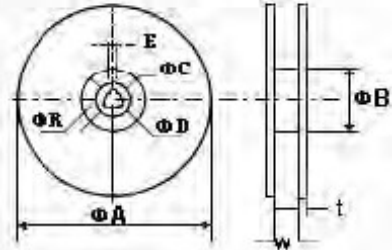
TEST ITEM	SPECIFICATION	TEST CONDITION
High Temperature Storage	No evidence of mechanical damage, Inductance change less than $\pm 5\%$ , Q change less than $\pm 10\%$	Test Temperature: $125\pm 2^{\circ}\text{C}$ (Ceramic core) $85\pm 2^{\circ}\text{C}$ (Ferrite core) Test Time: $96\pm 2$ Hours
Low Temperature Storage	No evidence of mechanical damage, Inductance change less than $\pm 5\%$ , Q change less than $\pm 10\%$	Test Temperature: $-40\pm 2^{\circ}\text{C}$ Test Time: $96\pm 2$ Hours
Moisture Resistance	No evidence of mechanical damage, Inductance change less than $\pm 5\%$ , Q change less than $\pm 10\%$	Test Temperature: $50\pm 2^{\circ}\text{C}$ Test Time:100Hours relative humidity:90~95%
Vibration	No evidence of mechanical damage, Inductance change less than $\pm 5\%$ , Q change less than $\pm 10\%$	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 continuity of Winding	Force:2Kg Test Time: $5\pm 1$ sec
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 $\pm 5\%$ , Q change less than $\pm 10\%$	Test Temperature: $85\pm 2^{\circ}\text{C}$ Test Time:1000Hours with rating current

**8. Packaging**

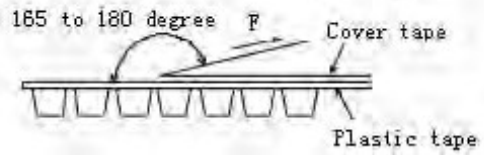
Tape



Reel Dimensions



Peeling off force  
Full strength  
0402~1210:20g~80g  
Speed of peeling off:  
300mm/min±10%



	A	B	T
膠帶 0805	1.85	2.40	1.45

unit	$\Phi A$	$\Phi B$	$\Phi C$	$\Phi D$	E	W	t	R
mm	178	60	13	21	2	8.4	2	1

包装数量(PACKAGING QUANTITY)

规格	0402
數量	3000