WL Series — Performance Specifications

Mechanical Performance									
Item		Specification	Test Method						
1	Vibration Test	Appearance : No damage L change: within ±5% Q change: within ±10%	Test device shall be soldered on the substrate Oscillation Frequency: 10 to 55 to 10Hz for 1min Amplitude: 1.5mm Time: 2hrs for each axis (X,Y, Z), total 6 hrs						
2	Resistance to Soldering Heat		Solder Temperature: 270 ± 5°C						
3	Component Adhesion (Push Test)	1 lbs. for 0402 2 lbs. for 0603 3 lbs. for all others	The device should be solderd ($260 \pm 5^{\circ}$ C for 10 secs) to a tinned copper substrate. A dynamiter force gauge should be applied to the side of the component. The device must withstand a minimum force of 2 or 4 pounds without a failure of adhesion on termination.						
4	Drop Test	No damage	Dropping chip by each side and each corner. Drop 10 times in total. Drop height : 100 cm Drop weight : 125 g						
5	Solderability Test	90% covered with solder	Inductor shall be dipped in a melted solder bath at 245 \pm 5°C for 5 secs.						
6	Resistance to Solvent Test	No damage on appearance and marking	MIL-STD202F, Method 215D						

Electrical Performance									
Item		Specification	Test Method						
1	Inductance		HP4291B						
2	Q	Refer to standard electrical characteristic spec	HP4291B						
3	SRF		HP8753D						
4	DC Resistance (RDC)		Micro-ohm meter (Gom-801G)						
5	Rated Currend (IDC)		Apply the current to coils, the inductance change should be less than 10% of initial value						
6	Overload Test	Inductors shall have no evidence of electrical and mechanical damage	Applied 2 times of rated allowed DC current to inductor for a period of 5 minute						
7	Withstanding Voltage Test	Inductors shall show no evidence of electrical and mechanical damage	AC voltage of 500 VAC applied between inductors terminal and case for 1 minute						
8	Insulation Resistance Test	10000Mohm min	100VDC applied between inductor terminal and case						

Climatic Tests											
	ltem	Specification	Test Method								
1	Temperature Characteristic		-40°C ~ +125°C								
2	Humidity Test		Temperature : 40 ± 2°C Relative Humidity : 90~95% Time : 96hrs± 2hrs Measured after exposure in the room condition for 2hrs								
3	Thermal Shock	Appearance: No damage L change : within ± 10% Q change : within ± 20%	Total: 5 cycles								
			Γ	Step	Temperature (C)	Time (min)					
			-	1	-25±3	30					
				2	25±2	15					
			-	3	125±3	30					
			Ţ	4	25±2	15					
4	High Temp Load Life	There Should be no	Temperature : 85 ± 2°C Time: 1000 ± 12hrs Load : Rated IDC								
5	Humididty Load Life	evidence of short or open circuit	Temperature : 85 ± 2°C Relative Humidity : 90~95% Time: 1000 ± 12hrs Load : Rated IDC								
Storage	storage Temperature: 25 ± 3°C; Humidity : < 80%RH										

Toll Free: (888) SEI-SEIS (888) 734-7347 www.seielect.com WWW.bdtIC.Com/SEI

email: marketing@seielect.com Rev 06/07