Product Change Notification

Product Group: Vishay Dale/**March 4, 2014/PCN-DI-192-2014 Rev 1**

IHLP additional manufacturing location

DESCRIPTION OF CHANGE: The assembly site for select IHLP models will offer an additional manufacturing location. The three manufacturing sites will be Yankton SD, USA, Beer Sheva, Israel, and Danshui, China.

CLASSIFICATION OF CHANGE: Addition of assembly Site in Danshui China

REASON FOR CHANGE: This new manufacturing location will supplement our existing capacity and will offer shorter lead times for most orders shipped to Asia.

EXPECTED INFLUENCE ON QUALITY/RELIABILTY/PERFORMANCE: There will be no effect on the quality, reliability, and/or performance.

PRODUCT CATAGORY: Inductors

PART NUMBERS/SERIES/FAMILIES AFFECTED:

IHLP-5050CE-01 IHLP-5050CE-11 IHLP-5050EZ-01 IHLP-5050EZ-11 IHLP-5050FD-01 IHLP-5050FD-11
IHLP-6767DZ-01 IHLP6767DZ-11 IHLP-6767GZ-01 IHLP-6767GZ-11

VISHAY BRAND(s): Vishay Dale

TIME SCHEDULE:
Start Shipment Date: Q3 2014
Last Time Buy Date: N/A
Last Time Shipment Date: N/A

SAMPLE AVAILABILITY: N/A

PRODUCT IDENTIFICATION: Lot Code marked on part after the date code.
AA through AZ – Country of Origin = USA
BA through MZ – Country of Origin = Israel
NA through ZZ – Country of Origin = China

QUALIFICATION DATA: See Table 1.

This PCN is considered approved, without further notification, unless we receive specific customer concerns or as specified by contract.

ISSUED BY: Doug Lillie, Product Marketing Manager

For further information, please contact your regional Vishay office.

CONTACT INFORMATION

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Table 1: IHLP Qualification Plan for China Manufacturing Location

Test #	Description	Ref. Spec. Meth / Cond	Test Conditions	End Point Δ Requirements	Sample Size	Results
1	Preconditioning for lead-free products	AEC-Q200 Rev C - Pb Free Specific Tests Table 4.2	As specified in sections 4.3.1 thru 4.3.3 except visual per DPS-11,865 10X magnification	L=±15% of initial, DCR =±15% of initial	30	Pass
2	Pre- and Post-Stress Electrical Test	IHLP Data Sheet	L (uH) – 100KHz and 250mV DCR – 25°C Ambient	L=±15% of initial, DCR =±15% of initial	All tests requiring electrical data	
3	High Temp Exposure	MIL-STD-202G Method 108A Condition D	125°C for 1000 (+24,-0) Hrs Unpowered	L=±15% of initial, DCR =±15% of initial	30	Pass
4	Temperature Cycling	JESD22 Method JA-104	-40C to +125C, 1000 cycles. Dwell =.25 Hour	L=±15% of initial, DCR =±15% of initial	30	Pass
5	Moisture Resistance	MIL-STD-202G Method 106G	10 Continuous 24 Hour Cycles, Steps 7a & 7b not required. Unpowered. Measurement at 24 ±2 hours after conclusion	L=±15% of initial, DCR =±15% of initial	30	Pass

6	Biased Humidity	MIL-STD-202G Method 103B	1000 hours @85°C/85%RH, Unpowered. Measurement within 24+/-2 hours after test.	L=±15% of initial, DCR =±15% of initial	30	Pass
7	Operational Life	MIL-PRF-27 Section 4.7.23	1000 hr @ 85°C with full rated current Do not perform the following tests: - Open or short circuit during test - Induced voltage after test - Insulation resistance after test - DWV after test	L=±15% of initial, DCR =±15% of initial	30	Pass
8	External Visual	MIL-STD-883G Method 2009.9	Inspect construction and workmanship.	Pass all criteria as defined in DPS-11,865 VA1	All	Pass
9	Physical Dimensions	JESD22 Method JB-100	Verify physical dimensions per part specification	All parts within dimensional tolerance per data sheet	30	Pass
10	Resistance to Solvents	MIL-STD-202G Method 215K	Add Aqueous wash chemical. OKEM Clean or equivalent. Do not use banned solvents.	Pass all criteria as defined in DPS-11,865 VA1 L=±15% of initial, DCR =±15% of initial	5	NA, (Inductors are laser marked)
11	Mechanical Shock	MIL-STD-202G Method 213B Condition C Figure 1	100G Peak, 6msec, half-sine waveform, 12.3 ft/sec velocity in each of three axis, X,Y, & Z.	Pass all criteria as defined in DPS-11,865 VA1 L=±15% of initial, DCR =±15% of initial	30	Pass

12	Vibration	MIL-STD-202G Method 204D	5g's for 20 minutes, 12 cycles each of 3 orientations. Test from 10-2000 Hz	Pass all criteria as defined in DPS-11,865 VA1 L=±15% of initial, DCR =±15% of initial	30	Pass
13	Resistance to Solder Heat	MIL-STD-202G Method 210F Condition K	IR/convection reflow. 250 ± 5°C for 30 ± 5sec. Ramp rate 1°C/s to 4°C/; Above 183°C for 90s-120s	L=±15% of initial, DCR =±15% of initial	30	Pass
14	Thermal Shock	MIL-STD-202G Method 107G	-40/+125°C. 300 cycles. 20 sec transfer, 15 minute dwell	Pass all criteria as defined in DPS-11,865 VA1 L=±15% of initial, DCR =±15% of initial	30	Pass
15	V-I Tests	IHLP Data Sheet	Per IHLP data sheet	Pass all criteria as defined on IHLP data sheet	10	Pass
16A	Solderability	J-STD-002C Method B1 Category 3 (Forward Compatibility)	Solder Bath/Dip and Look Test. 260°C (+0/-5) °C. 90° dipping angle.	95% or greater coverage on "A" (seating plane) per J-STD-002C	15	Pass
16B	Solderability	J-STD-002C Method B Category 3 (Backward Compatibility)	Solder Bath/Dip and Look Test. 220°C (+5/-0) °C. 90° dipping angle.	95% or greater coverage on "A" (seating plane) per J-STD-002C	15	Pass

17	ESD	CDF-AEC-Q200 Method – 002	Human Body Model	Pass all criteria as defined in DPS-11,865 VA2 L = ±15% of initial, DCR ±15%	15	Pass