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**11 Jan 2023**

Digi-Key Corporation  
701 Brooks Ave South  
Thief River Falls, Minnesota 56701

**PCN-01602****Subject: Adding additional testing site.**

Dear Valued Customer,

MACOM Technology Solutions has a goal of providing redundant manufacturing capability for increased surge capacity as well as an uninterrupted supply chain. In alignment with this goal, we are pleased to announce an additional testing site for the parts listed in the next pages.

In addition to our current testing sites, we planned to test these parts at our long-standing Contract Manufacturer, Year 2000, Ho Chi Minh City, Vietnam. Year 2000 is a valued, high-quality manufacturing partner for many MACOM products.

In accordance with MACOM Technology Solutions' customer notification policy, you are receiving this notice because you have purchased one or more of the products listed in the previous two-year period.

Please contact your local sales representative if you have any specific questions.

Sincerely

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Director, Product Marketing  
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**Appendix I**  
Affected part numbers

Part Number	Part type
MSWSE-040-10	Plastic Diode
MSWSE-050-17	Plastic Diode
MSWSE-020-05-NPG	Plastic Diode
MSWSE-050-10	Plastic Diode
MSWSE-005-15	Plastic Diode
MSWSE-044-10	Plastic Diode
MSWSE-010-15S	Plastic Diode
MSWSE-020-05	Plastic Diode
MSWSE-005-10S	Plastic Diode
M5X1839-1	Chip Diode
MX52272-11	Chip Diode
MX40282-11	Chip Diode
MPN7345-C40	Chip Diode
M2X3487	Chip Diode
MMP7041-11	Chip Diode
MLP7110-11	Chip Diode
M5X1365	Chip Diode
MX51279-11	Chip Diode
M5X4289	Chip Diode
MX51589-11	Chip Diode
M5X1095	Chip Diode
MMPN080045	Chip Diode

Part Number	Part type
<b>MX51745-11</b>	Chip Diode
<b>MX52009-11</b>	Chip Diode
<b>M2X1498</b>	Chip Diode
<b>MMD820-C12</b>	Chip Diode
<b>M5X4656</b>	Chip Diode
<b>MX50351-11</b>	Chip Diode
<b>MA46H120</b>	Chip Diode
<b>MA4SW210</b>	Chip Diode
<b>9028RK-SP14</b>	Chip Capacitor
<b>9115R0K-BOO</b>	Chip Capacitor
<b>902R2K</b>	Chip Capacitor
<b>9050RM-SP18</b>	Chip Capacitor
<b>90R5K-SP</b>	Chip Capacitor
<b>9110RK</b>	Chip Capacitor
<b>M3X1513</b>	Chip Capacitor
<b>9110RM-15</b>	Chip Capacitor
<b>MC2S050020-020</b>	Chip Capacitor

**Appendix II**  
The new testing and assembly facility



**Appendix III**  
Qualification process capability data

Three representative part numbers (MSWSE-050-17 and MX51267-11 and MC2S022025-025) are tested and qualified in Year 2000 as below, and the rest parts in the pcn can be qualified by similarity to the representative parts as they have the same production process.

**1. Plastic Diode.**

**MSWSE-050-17**

Test conditions: IR1max=5uA, under -505V.

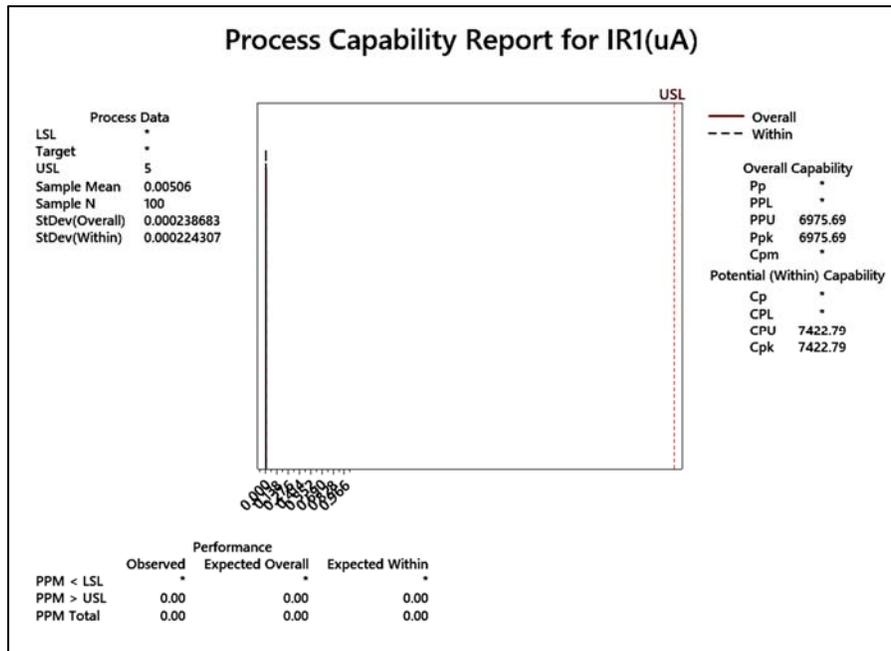
IR2max=0.1uA, under -100V.

Cj1max=0.245pF, under -50V.

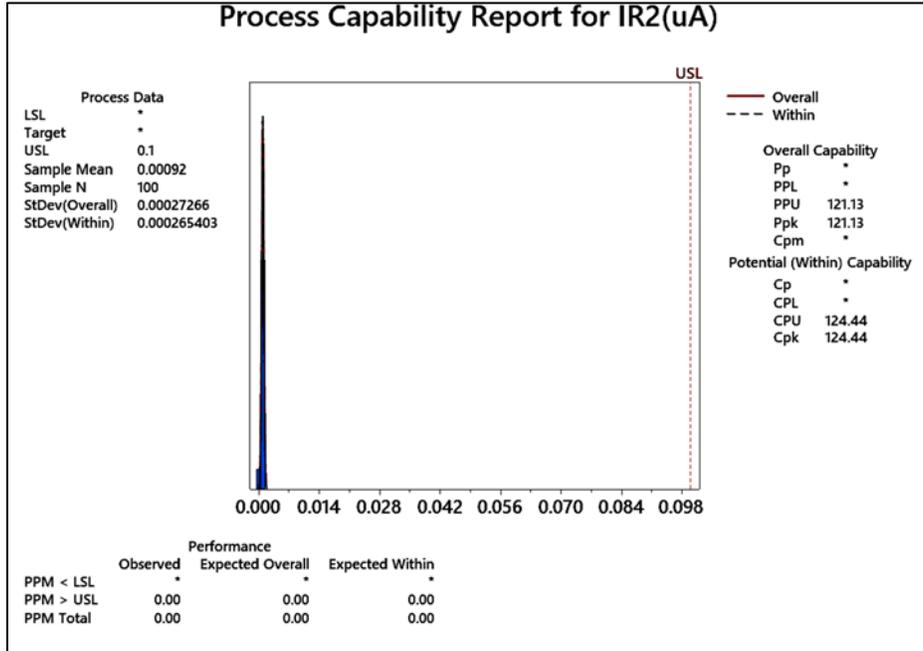
VF1max=0.945V, under 50mA.

Sample size =100,10 sub-groups.

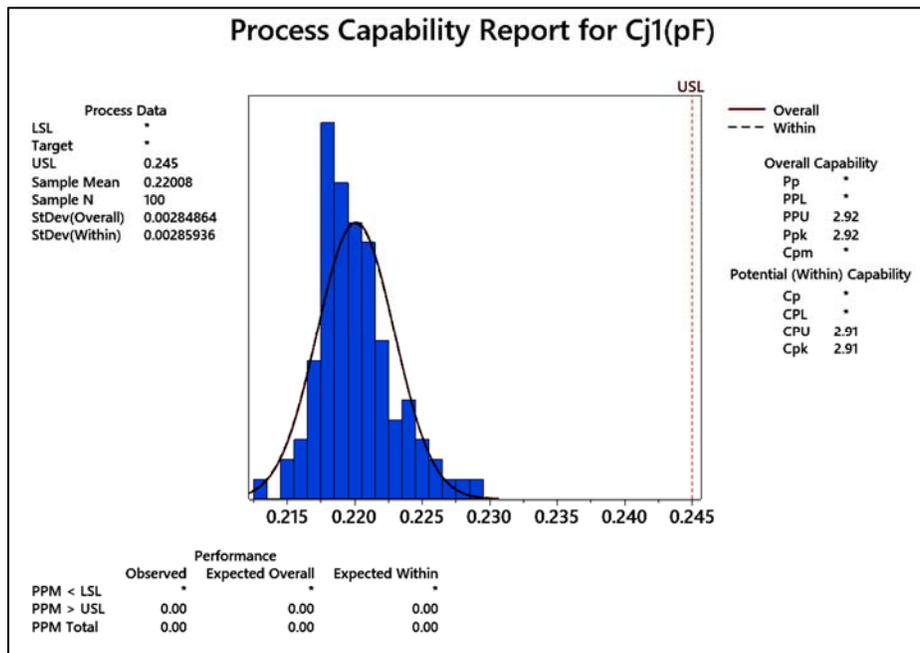
**IR1:**



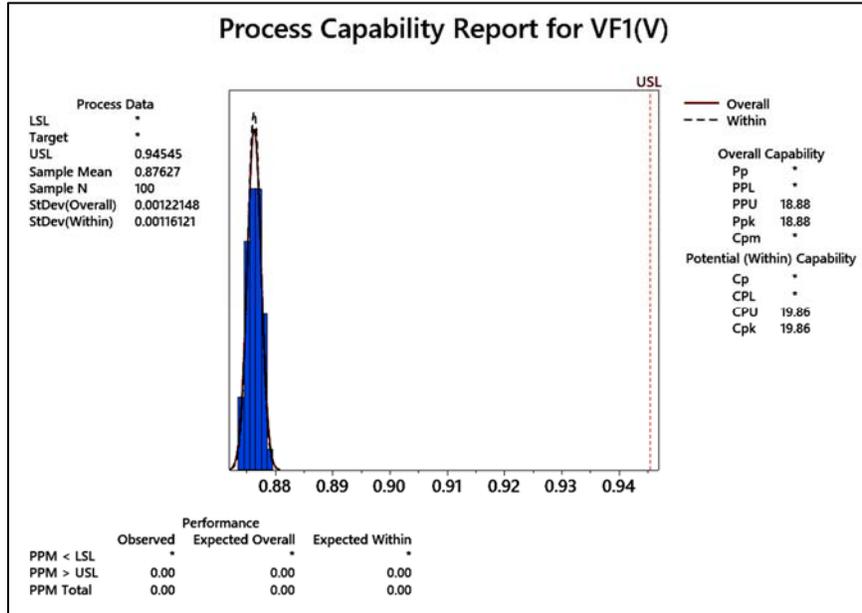
IR2:



Cj1:



**VF1:**



**2. Chip Diode.**

**MX51267-11**

Test conditions: IR1max=10uA, under -1100V.

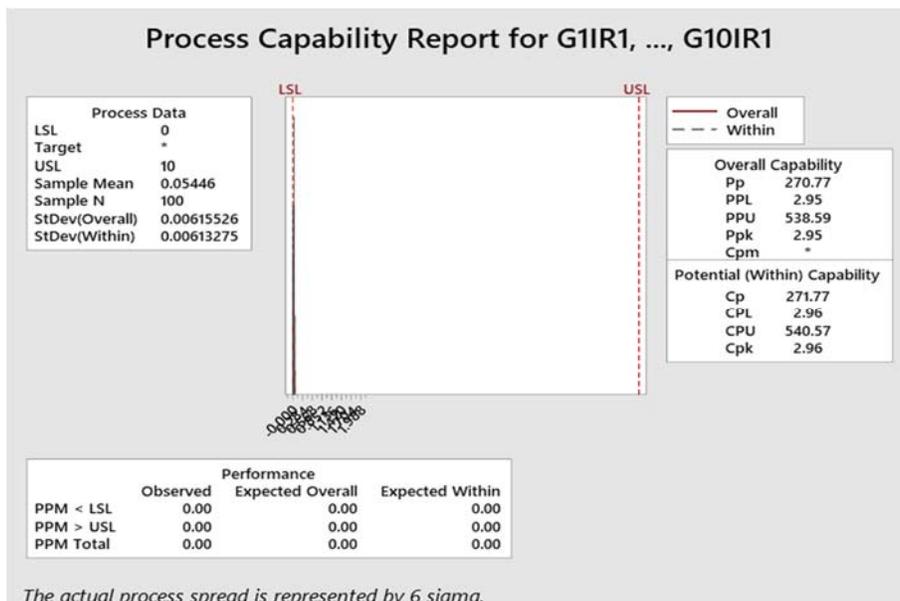
IR2max=0.05uA, under -1000V.

Cj1max=0.25pF, under -28V.

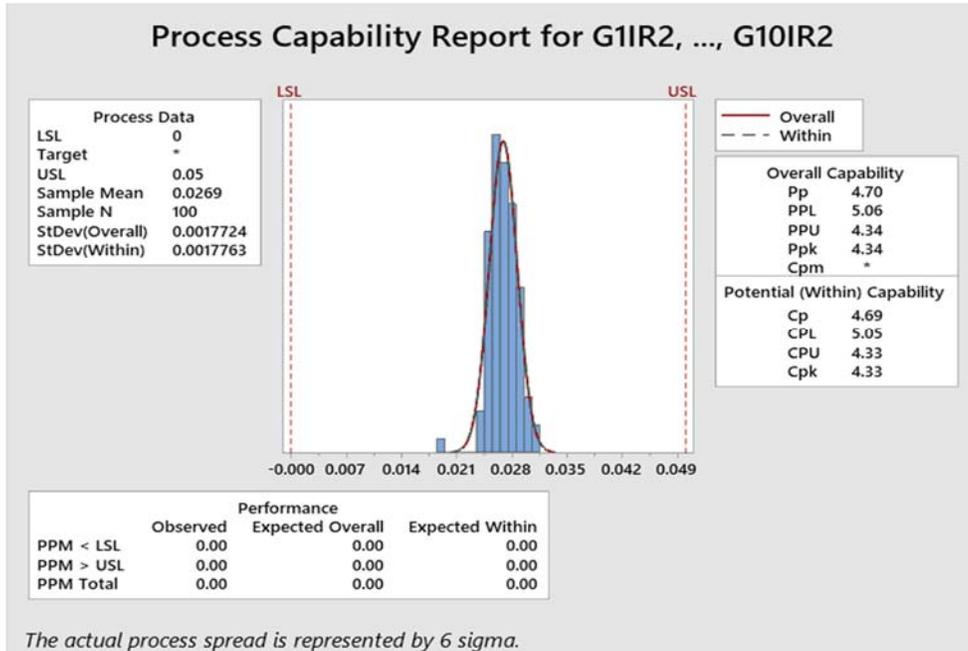
VF1max=1.25V, under 100mA.

Sample size=100,10 sub-groups.

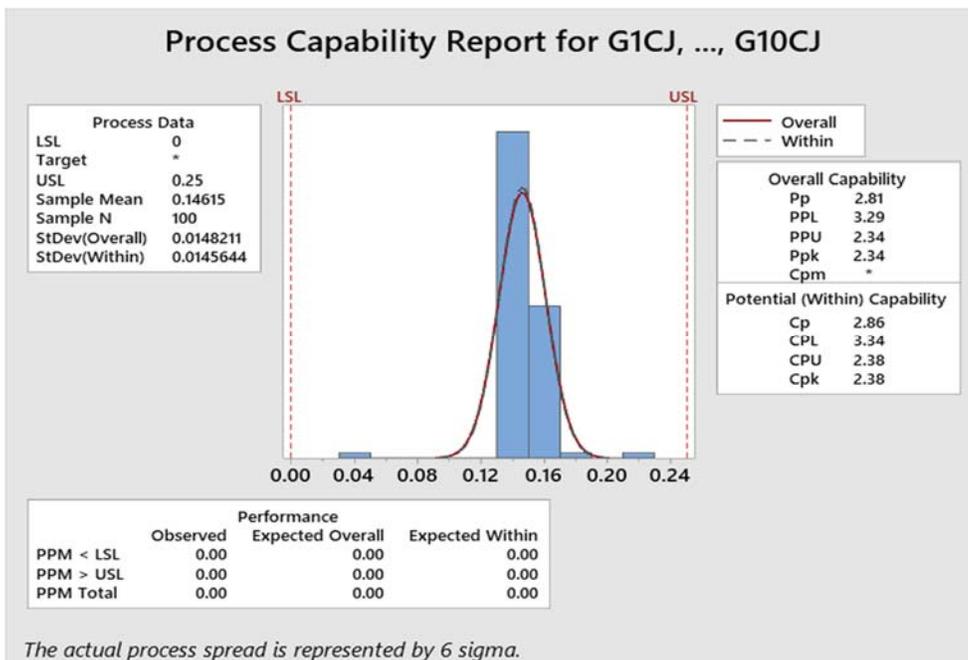
**IR1:**



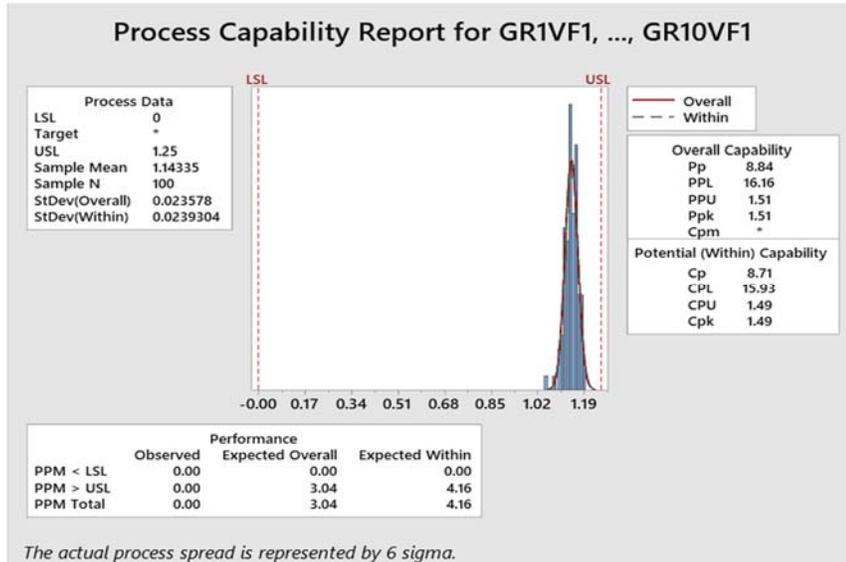
IR2:



Cj1:



**VF1:**



**3. Chip Capacitor.**

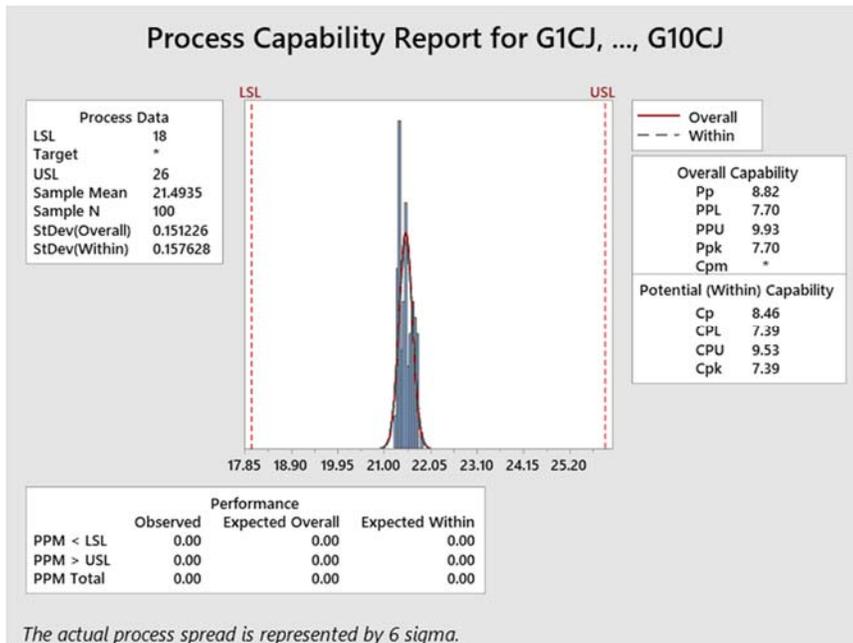
**MC2S022025-025**

Test conditions: Cj1min=18pF, Cj1max=26pF, under 0V.

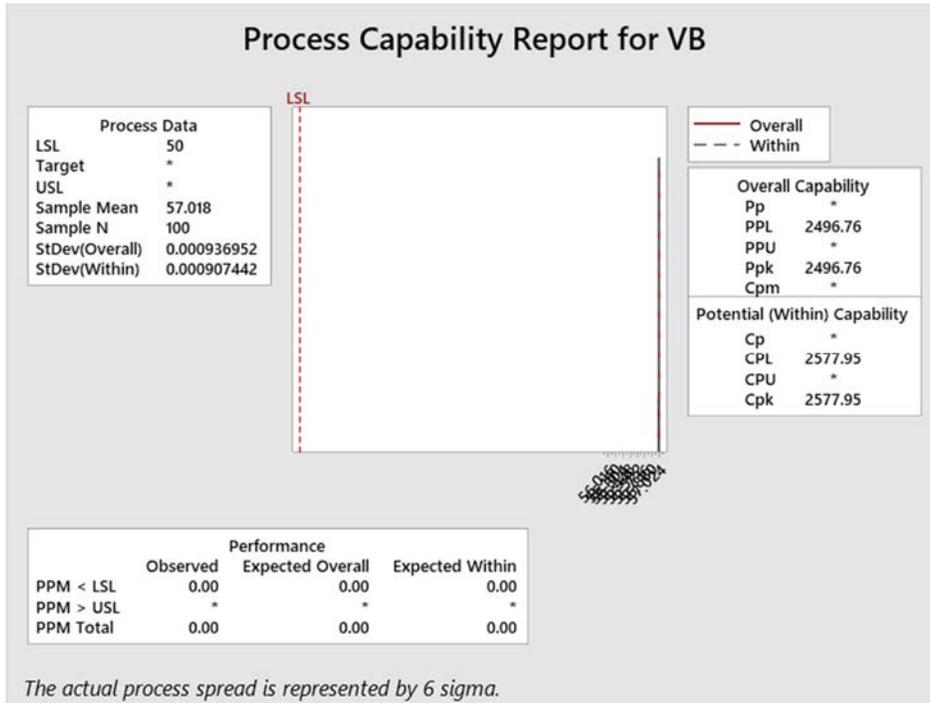
VBmin=50V, under -10uA.

Sample size=100,10 sub-groups.

**CJ1:**



VB:



**Appendix IV**

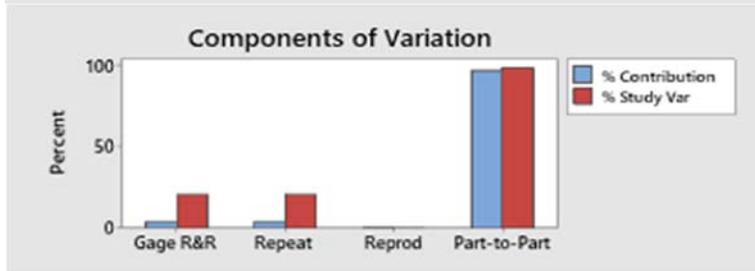
Qualification Gage R&R testing data

**1. MSWSE-040-10 Plastic Diode test parameters**

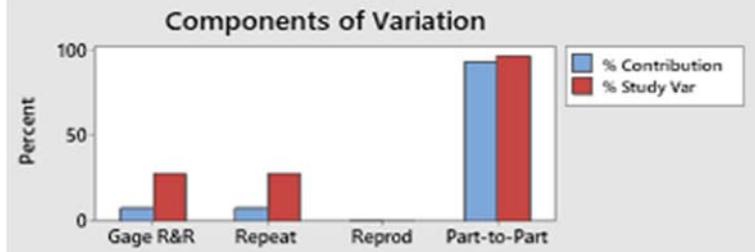
GR&R summary:

Specification:-			
a) GR&R Contribution % $\leq 10\%$			
b) GR&R Variation % $\leq 30\%$			
Parameter	GR&R Contribution %	GR&R Variation% GR&R	Result
IR1	4.2	20.5	PASS
IR2	7.89	28.1	PASS
Cj	0.03	1.83	PASS
VF	8.97	29.69	PASS

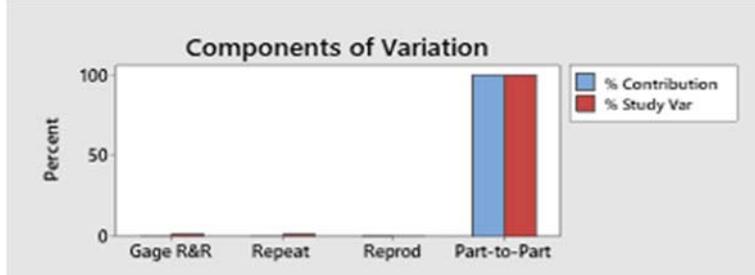
### Gage R&R (ANOVA) Report for IR1



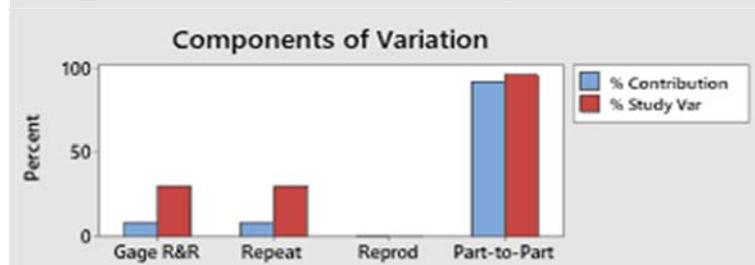
### Gage R&R (ANOVA) Report for IR2(uA)



### Gage R&R (ANOVA) Report for Cj1



### Gage R&R (ANOVA) Report for VF1

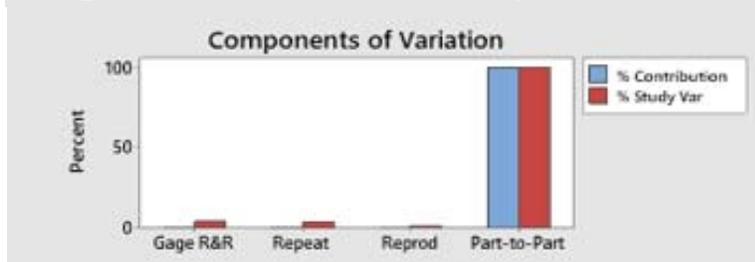


**2. Chip Diode test parameters**

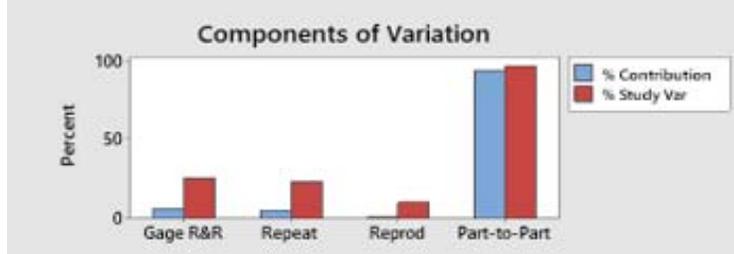
GR&R summary:

Specification:-			
a) GR&R Contribution % $\leq 10\%$			
b) GR&R Variation % $\leq 30\%$			
Parameter	GR&R Contribution % GR&R	GR&R Variation % GR&R	Result
IR1	0.21	4.57	PASS
IR2	6.62	25.72	PASS
Cj1	1.13	10.65	PASS
VF1	2.13	14.6	PASS

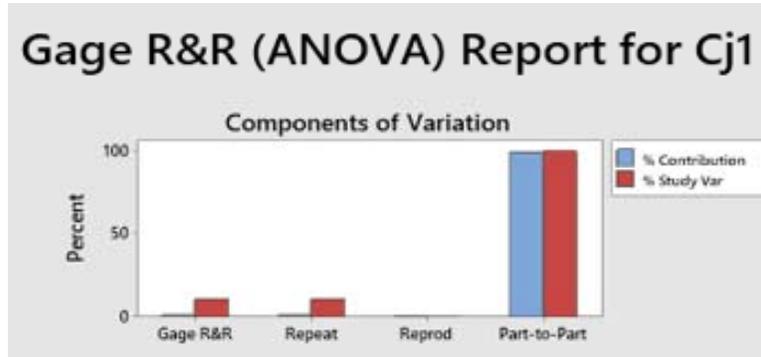
**Gage R&R (ANOVA) Report for IR1**



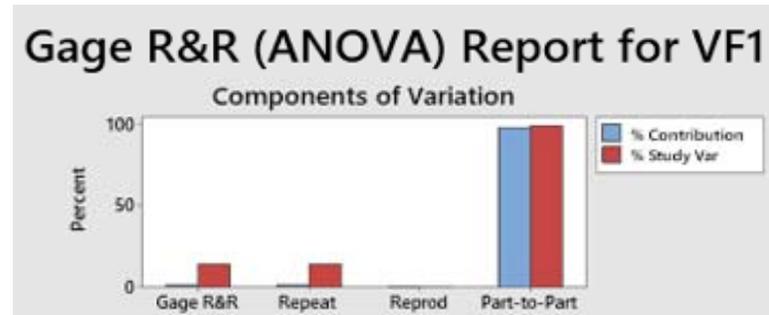
**Gage R&R (ANOVA) Report for IR2**



### Gage R&R (ANOVA) Report for Cj1



### Gage R&R (ANOVA) Report for VF1

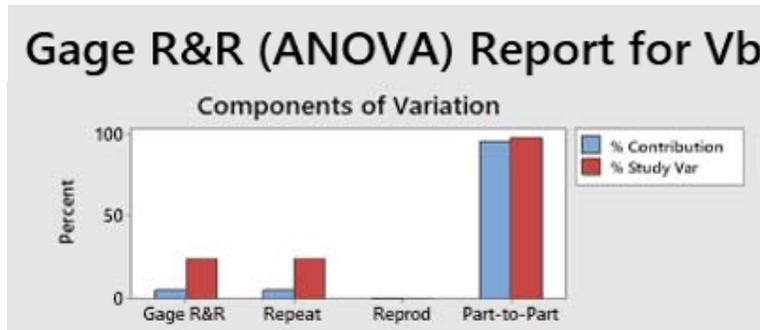


### 3. Chip Capacitor test parameters

GR&R summary:

Specification:-			
a) GR&R Contribution % $\leq 10\%$			
b) GR&R Variation % $\leq 30\%$			
Parameter	GR&R Contribution % GR&R	GR&R Variation% GR&R	Result
VB	5.69	23.85	PASS
Cj1	0	0.67	PASS

### Gage R&R (ANOVA) Report for Vb



## Gage R&R (ANOVA) Report for Cj1

