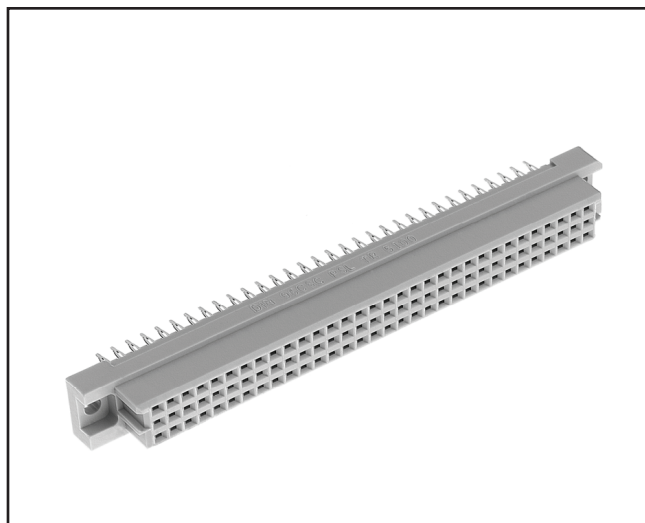


3M™ DIN C-Form Socket

.100" Standard Mount, Vertical, Solder Tail or Press-Fit Termination DIN

41612 Series



- Multi-pin count socket for VME, Multibus II, and VXI backpanels
- Press-fit or solder tail terminals for PCB
- Expanded pin counts
- Optional retention clips
- Mates with C-form and R-form plugs
- See Regulatory Information Appendix (RIA) for chemical compliance information

Date Modified: October 28, 2008

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Sheet 1 of 4

Physical

Insulation:

Material: Glass Filled Polyester (PCT)
Flammability: UL94V-0
Color: Gray or Black

Contact:

Material: Copper Alloy

Plating:

Underplating: 50 μ " [1.27 μ m] Min. Nickel
Wiping Area: (See Ordering Information)
Termination Area: (See Ordering Information)

Marking: Part Number and Date Code

Electrical

Contact Resistance: 20 m Max.

Current Rating: 3.0 A @ 30°C T-rise above ambient

Insulation Resistance: 1 x 10³ M min. at 500 V_{DC}

Withstanding Voltage: 1 x 10³ V_{AC} for 1 minute

Environmental

Temperature Rating: -55°C to +125°C

Process Temperature Rating: 260°C (per J-STD-020C)

Moisture Sensitivity Level: 1 (per J-STD-020C)

UL File No.: E68080



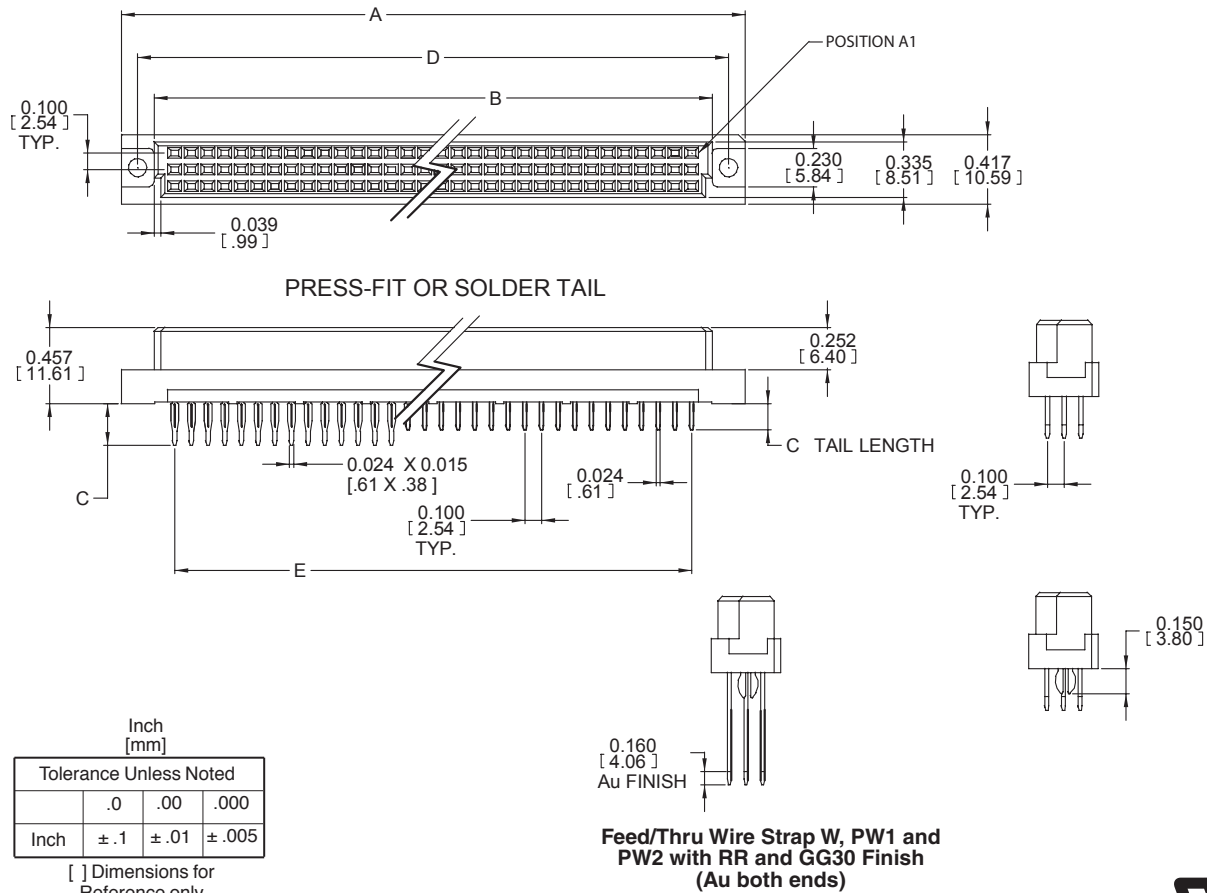
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3M™ DIN C-Form Socket

.100" Standard Mount, Vertical, Solder Tail or Press-Fit Termination DIN

41612 Series



Ordering Information

DIN-XXX CS X-XXX-XXXX

Contact Quantity
See Table 1

Plating and Insulating Color Options:
See Table 3

Contact Loading:
A = A Row only
B = Rows A & C Filled
C = Rows A, B, & C Filled
D = Rows A & B Filled
E = B Row only

Termination Options:
See table 2

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41612 Series

Table 1					
Contact Quantity	Load Pattern	A	B	D	E
016	A	2.140 [54.36]	1.746 [44.35]	1.943 [49.35]	1.500 [38.10]
032	B	2.140 [54.36]	1.746 [44.35]	1.943 [49.35]	1.500 [38.10]
048	C	2.140 [54.36]	1.746 [44.35]	1.943 [49.35]	1.500 [38.10]
32	D	2.140 [54.36]	1.746 [44.35]	1.943 [49.35]	1.500 [38.10]
016	E	2.140 [54.36]	1.746 [44.35]	1.943 [49.35]	1.500 [38.10]
032	A	3.740 [95.00]	3.346 [84.99]	3.543 [89.99]	3.100 [78.74]
064	B	3.740 [95.00]	3.346 [84.99]	3.543 [89.99]	3.100 [78.74]
096	C	3.740 [95.00]	3.346 [84.99]	3.543 [89.99]	3.100 [78.74]
064	D	3.740 [95.00]	3.346 [84.99]	3.543 [89.99]	3.100 [78.74]
032	E	3.740 [95.00]	3.346 [84.99]	3.543 [89.99]	3.100 [78.74]
040	A	4.540 [115.32]	4.146 [105.31]	4.343 [110.31]	3.900 [99.06]
080	B	4.540 [115.32]	4.146 [105.31]	4.343 [110.31]	3.900 [99.06]
120	C	4.540 [115.32]	4.146 [105.31]	4.343 [110.31]	3.900 [99.06]
080	D	4.540 [115.32]	4.146 [105.31]	4.343 [110.31]	3.900 [99.06]
040	E	4.540 [115.32]	4.146 [105.31]	4.343 [110.31]	3.900 [99.06]
050	A	5.540 [140.72]	5.146 [130.71]	5.343 [135.71]	4.900 [124.46]
100	B	5.540 [140.72]	5.146 [130.71]	5.343 [135.71]	4.900 [124.46]
150	C	5.540 [140.72]	5.146 [130.71]	5.343 [135.71]	4.900 [124.46]
100	D	5.540 [140.72]	5.146 [130.71]	5.343 [135.71]	4.900 [124.46]
050	E	5.540 [140.72]	5.146 [130.71]	5.343 [135.71]	4.900 [124.46]

Table 2		
SOLDER TERMINATION OPTION No	DIM "C" in (mm)	Comments
R1L	0.157 (3.99)	with retention clips
R3L	0.090 (2.29)	with retention clips
S1 contact thickness (solder tail) = 25mil	0.157 (3.99)	no retention clips
S1L contact thickness (solder tail) = 14mil	0.157 (3.99)	no retention clips
S3L	0.090 (2.29)	no retention clips
W	0.512 (13.00)	wire wrap
PRESS-FIT TERMINATION OPTION No		
PSL	0.189 (4.80)	
PW1	0.512 (13.00)	
PW2	0.669 (16.99)	
PS	0.236 (5.99)	

Table 3				
Plating Suffix	Insulator Color	Press-Fit Terminations	Solder Tail Terminations	Plating Composition
TG30	Gray	(RIA E2 & C2 apply)	(RIA E3 & C2 apply)	0.76 µm [30 µ"] Min. Au Contact Area 2.54 µm [100 µ"] Min. SnPb Tail Area 1.27 µm [50 µ"] Min. Ni all over
TR	Gray	(RIA E2 & C2 apply)	(RIA E3 & C2 apply)	0.08 µm [3 µ"] Min. Au Contact Area 0.18 µm [7 µ"] Min. PdNi Contact Area 2.54 µm [100 µ"] Min. SnPb Tail Area 1.27 µm [50 µ"] Min. Ni all over
RR	Gray	(RIA E2 & C2 apply)	N/A	0.08 µm [3 µ"] Min. Au over 0.18 µm [7 µ"] Min. PdNi Contact Area (each end) 2.54 µm [100 µ"] Min. SnPb Term. Area 1.27 µm [50 µ"] Min. Ni all over
GG30	Gray	(RIA E2 & C2 apply)	N/A	0.76 µm [30 µ"] Min. Au Contact Area (each end) 2.54 µm [100 µ"] Min. SnPb Term. Area 1.27 µm [50 µ"] Min. Ni all over
MH	Black	(RIA E1 & C1 apply)	(RIA E1 & C1 apply)	0.76 µm [30 µ"] Min. Au Contact Area 5.08 µm [200 µ"] Min. Reflowed Matte Whisker Mitigating Sn Term. Area 1.27 µm [50 µ"] Min. Ni all over
HS	Black	(RIA E1 & C1 apply)	(RIA E1 & C1 apply)	0.08 µm [3 µ"] Min. Au over 0.18 µm [7 µ"] Min. PdNi Contact Area 5.08 µm [200 µ"] Min. Reflowed Matte Whisker Mitigating Sn Term. Area 1.27 µm [50 µ"] Min. Ni all over
KT	Black	(RIA E1 & C1 apply)	(RIA E1 & C1 apply)	0.25 µm [10 µ"] Min. Au Contact Area 5.08 µm [200 µ"] Min. Reflowed Matte Whisker Mitigating Sn Term. Area 1.27 µm [50 µ"] Min. Ni all over

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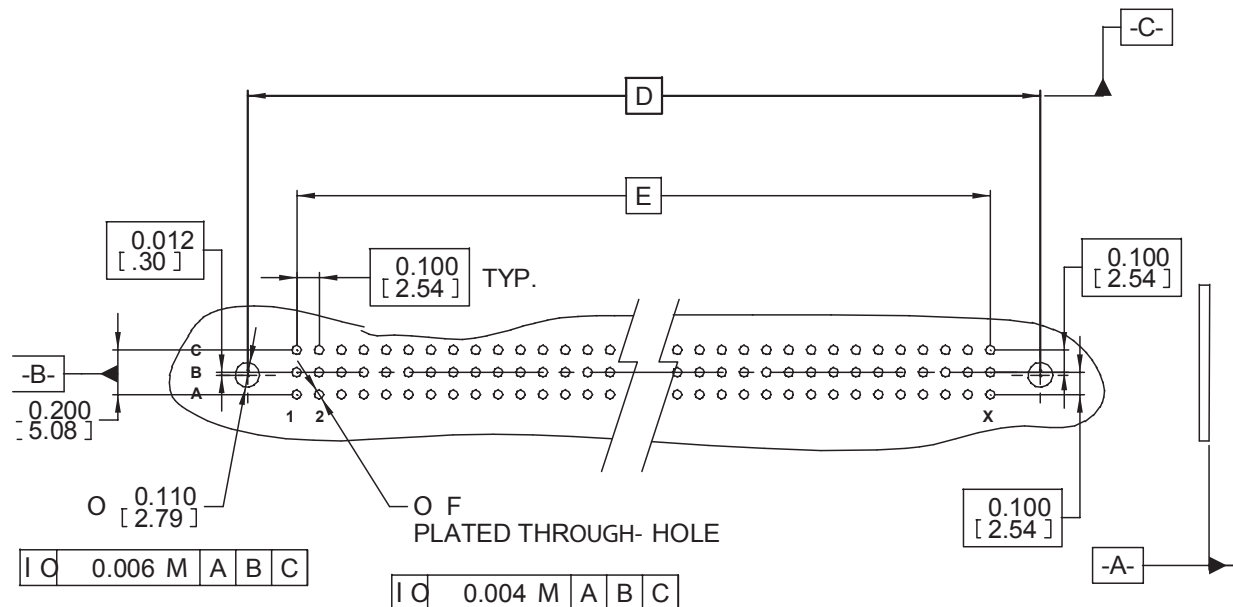
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41612 Series



RECOMMENDED MOUNTING HOLE PATTERN

HOLE PLATING TABLE For TG, TR, RR (Press-Fit Leads)

HOLE	DRILLED HOLE DIA. in (mm)	Cu THICKNESS in (mm)	SnPb THICKNESS μin (μm)	FINISHED DIA. in (mm)
"F"				0.037 - 0.043 (0.94 - 1.09)

HOLE PLATING TABLE For TG, TR, RR (Solder Tail Leads)

HOLE	DRILLED HOLE DIA. in (mm)	Cu THICKNESS in (mm)	SnPb THICKNESS μin (μm)	FINISHED DIA. in (mm)
"F"				0.041 - 0.049 (1.04 - 1.24)

HOLE PLATING TABLE For MH, HS and KT (Press-Fit Leads)

HOLE	DRILLED HOLE DIA. in (mm)	Cu THICKNESS in (mm)	Immersion Whisker Mitigating Matte Sn Thickness μin (μm)	FINISHED DIA. in (mm)
"F"	0.0425-0.044 (1.080-1.118) #57 OR 1.10mm TWIST DRILL	0.0010 - 0.0020 (0.025 - 0.045)	20 - 100 (0.508 - 2.54)	0.037 - 0.043 (0.94 - 1.09)

HOLE PLATING TABLE For MH, HS, and KT (Solder Tail Leads)

HOLE	DRILLED HOLE DIA. in (mm)	Cu THICKNESS in (mm)	Immersion Matte Sn Thickness μin (μm)	FINISHED DIA. in (mm)
"F"				0.041 - 0.049 (1.04 - 1.24)

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Sheet 4 of 4



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Regulatory Information Appendix

3M Electronic Solutions Division/Interconnect

EUROPE

Appendix E1: European Union RoHS

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment, as amended by EU Commission Decision 2005/618/EC.

This product is RoHS Compliant 2005/95/EC.

“RoHS Compliant 2005/95/EC” means that the product or part (“Product”) does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

Appendix E2: European Union RoHS

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment, as amended by EU Commission Decision 2005/618/EC.

This product contains lead in the compliant pin area in excess of the maximum concentration value allowed but is compliant by exemption under EU Commission Decision 2005/747/EC.

“RoHS Compliant 2005/95/EC” means that the product or part (“Product”) does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

Appendix E3: European Union RoHS

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment as amended by Commission Decision 2005/618/EC.

This product contains lead in the solder tail area in excess of the maximum concentration value allowed.

Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

Appendix E4: European Union RoHS

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment, as amended by EU Commission Decision 2005/618/EC, as amended by EU Commission Decision 2005/717/EC, as amended by EU Court of Justice Decision 2008/C 116/04

This product contains decaBDE in the insulating material in excess of the maximum concentration allowed for finished products subject to EU RoHS that are placed on the EU market after June 30, 2008.

Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

Appendix E5: European Union RoHS

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, as amended by EU Commission Decision 2005/618/EC.

This product contains lead in excess of the maximum concentration value allowed but is compliant by exemption under Item 6 of the Annex to the Directive.

“RoHS Compliant 2005/95/EC” means that the product or part (“Product”) does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

CHINA

Appendix C1: China RoHS



Electronic Industry Standard of the People’s Republic of China, SJ/T11363-2006, Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products.

This symbol, per Marking for the Control of Pollution Caused by Electronic Information Products, SJ/T11364-2006, means that the product or part **does not** contain any of the following substances in excess of the following maximum concentration values in any homogeneous material: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers (excluding decaBDE); or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

Appendix C2: China RoHS



Electronic Industry Standard of the People’s Republic of China, SJ/T11363-2006, Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products.

This symbol, per Marking for the Control of Pollution Caused by Electronic Information Products, SJ/T11364-2006, means that the product or part **does** contain a substance, as detailed in the chart below, in excess of the following maximum concentration values in any homogeneous material: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers (excluding decaBDE); or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

The numerical reference in the symbol above should not be construed as a representation regarding the product’s life or an extension of a product warranty. The product warranty is stated below. In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the product Warranty stated below.

产品中有毒有害物质或元素的名称及含量 Name and Content of Hazardous Substances or Elements						
部件名称 (Part or Component Name)	有毒有害物质或元素 (Hazardous Substances or Elements)					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
端子镀层 (contact plating)	×	○	○	○	○	○
○：表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T11363-2006 标准规定的限量要求以下。(Indicates that this hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.)						
×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006 标准规定的限量要求。(Indicates that this hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363-2006.)						

Appendix C3: China RoHS

Electronic Industry Standard of the People's Republic of China, SJ/T11363-2006, Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products.

This symbol, per Marking for the Control of Pollution Caused by Electronic Information Products, SJ/T11364-2006, means that the product or part **does** contain a substance, as detailed in the chart below, in excess of the following maximum concentration values in any homogeneous material: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers (excluding decaBDE); or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M's best knowledge and belief based upon information provided by third party suppliers to 3M.

The numerical reference in the symbol above should not be construed as a representation regarding the product's life or an extension of a product warranty. The product warranty is stated below. In the event any product is proven not to conform with 3M's Regulatory Information Appendix, then 3M's entire liability and Buyer's exclusive remedy will be in accordance with the product Warranty stated below.

产品中有毒有害物质或元素的名称及含量 Name and Content of Hazardous Substances or Elements

部件名称 (Part or Component Name)	有毒有害物质或元素 (Hazardous Substances or Elements)					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
合金 (Metal alloy)	×	○	○	○	○	○
○：表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T11363-2006 标准规定的限量要求以下。(Indicates that this hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.) ×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006 标准规定的限量要求。(Indicates that this hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363-2006.)						

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