



## DOCUMENT CHANGE REQUEST

DCR number	481	Changes required for:	General	Originator:	Steve Thacker - ESCC
Date:	2009/03/19	Date sent:	2009/03/19	Organisation:	ESA/ESTEC
Status:	IMPLEMENTED				

Title:	Resistor Fixed Chip Metal Foil, based on Type SMP-PW, SMS-PW, SMT-PW		
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Number:	4001/027	Issue:	1
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Other documents affected:

Page:

Page 6 Table 1(a)  
Page 16 Appendix A

Paragraph:

Page 6 Table 1(a)  
Page 16 Appendix A

Original wording:

Proposed wording:

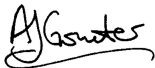
Table 1(a): amend the style for Variant 02 to be: 2512 (was 2515). The same amendment to the style shall be applied to the ESCC QPL, REP005, certificate 285 for ISABELLENHÄ.TTE.

All pages: add issue number to page header (now issue 2)

Appendix A: Add line separators to 1st & 2nd items, as indicated in the attached mark-up.

Justification:

Correction of typographic error plus minor editorial amendments

Attachments:
DCR_Attachment_4001027.pdf, null
Modifications:
N/A
Approval signature:

Date signed:
2009-03-19

Hand Mark-up for  
DCR  
S. Thacker. 4/3/9.



Pages 1 to 16

**RESISTOR, FIXED, CHIP, METAL FOIL**

**BASED ON TYPE SMP-PW, SMS-PW, SMT-PW**

**ESCC Detail Specification No. 4001/027**

<b>2</b>	<b>March 2009</b>
Issue <b>✓</b>	<del>October 2008</del>



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**Table 1(a) TYPE VARIANTS AND RANGE OF COMPONENTS**

Variant	Type	Style (Note 1)	Resistance Range $R_n$		Tolerance ( $\pm\%$ )	Temperature Coefficient TC ( $\pm 10^{-6}/^{\circ}\text{C}$ )	Value Series	Weight max (g)
			Min ( $\Omega$ )	Max ( $\Omega$ )				
01	SMP- PW	2010	0.005	1.000	0.5, 1	Note 2	Any value in $\Omega$ in the resistance range to 3 decimal places	0.06
02	SMS- PW	<del>2515</del>	0.003	1.000	0.5, 1	Note 2		0.10
03	SMT- PW	2817	0.004	2.000	0.5, 1	Note 2		0.15

**NOTES:**

- See Figure 2
- 

Temperature Coefficient/ ( $\pm 10^{-6}/^{\circ}\text{C}$ )	Remarks
-100, +0	over $T_{\text{amb}} = -55^{\circ}\text{C}$ to $+22^{\circ}\text{C}$
$\pm 60$	over $T_{\text{amb}} = +22^{\circ}\text{C}$ to $+170^{\circ}\text{C}$
$\pm 50$	over $T_{\text{amb}} = -55^{\circ}\text{C}$ to $+60^{\circ}\text{C}$

**Table 1(b) MAXIMUM RATINGS**

No.	Characteristics	Variant	Style	Symbol	Maximum Rating	Unit	Remarks
1	Rated Dissipation	01	2010	$P_n$	1	W	Note 1
		02	2512		2		Note 2
		03	2817		3		Note 1
2	Rated Voltage	All	All	$U_R$	$\sqrt{(P_n \times R_n)}$	V	Note 3
3	Insulation Voltage	All	All	$U_I$	200	V	-
4	Operating Temperature Range	All	All	$T_{\text{op}}$	-55 to +170	$^{\circ}\text{C}$	$T_{\text{amb}}$
5	Storage Temperature Range	All	All	$T_{\text{stg}}$	-55 to +170	$^{\circ}\text{C}$	-
6	Soldering Temperature	All	All	$T_{\text{sol}}$	+260	$^{\circ}\text{C}$	Note 4

**NOTES:**

- At  $T_{\text{amb}} \leq +130^{\circ}\text{C}$ . For derating at  $T_{\text{amb}} > +130^{\circ}\text{C}$ , see Figure 1.
- At  $T_{\text{amb}} \leq +120^{\circ}\text{C}$ . For derating at  $T_{\text{amb}} > +120^{\circ}\text{C}$ , see Figure 1.
- $R_n$  = rated resistance.
- Duration 5 seconds maximum.

## APPENDIX A

### AGREED DEVIATIONS FOR ISABELLENHUETTE (D)

Items Affected	Description of Deviation
Deviations from Qualification Tests (Chart IV) and Table 6	Para. 9.8.2, Voltage Proof: Not applicable.
	Para. 9.14, Climatic Sequence:
	Para. 9.14.5, Low Air Pressure: Not applicable
	Para. 9.14.7, d.c. Load: Not applicable
Deviations from Lot Acceptance Tests (Chart V) and Table 6	Para. 9.19, Permanence of Marking: Not applicable
	Para. 9.8.2, Voltage Proof: Not applicable.
	Para. 9.14, Climatic Sequence:
	Para. 9.14.5, Low Air Pressure: Not applicable
Marking of Tolerance on Resistance Value	Para. 9.14.7, d.c. Load: Not applicable
	Para. 9.19, Permanence of Marking: Not applicable
Marking of Traceability Information	The tolerance on resistance value may be marked using the actual numeric value (0.5% or 1%) instead of the specified code letter.
	The manufacturing date code may be marked using a three-digit code where the first digit is a letter to indicate the year of manufacture in accordance with the 20-year cycle code per Table 10a of IEC Publication No. 60062, and the last two digits indicate the week of the year (i.e. 01 to 52) during which encapsulation of the final production process occurred. For example: W41 for week 41 of 2008

add lines