

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

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Table 1(a) TYPE VARIANTS AND RANGE OF COMPONENTS

Variant	Type	Style (Note 1)	Resistance Range R_n		Tolerance (±%)	Temperature Coefficient TC ($\pm 10^{-6}/^{\circ}\text{C}$)	Value Series	Weight max (g)
			Min (Ω)	Max (Ω)				
01	SMP- PW	2010	0.005	1.000	0.5, 1	Note 2	Any value in Ω in the resistance range to 3 decimal places	0.06
02	SMS- PW	2515	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:

1. See Figure 2
- 2.

2512

Temperature Coefficient/ ($\pm 10^{-6}/^{\circ}\text{C}$)	Remarks
-100, +0	over $T_{\text{amb}} = -55^{\circ}\text{C}$ to $+22^{\circ}\text{C}$
± 60	over $T_{\text{amb}} = +22^{\circ}\text{C}$ to $+170^{\circ}\text{C}$
± 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_{op}	-55 to +170	$^{\circ}\text{C}$	T_{amb}
5	Storage Temperature Range	All	All	T_{stg}	-55 to +170	$^{\circ}\text{C}$	-
6	Soldering Temperature	All	All	T_{sol}	+260	$^{\circ}\text{C}$	Note 4

NOTES:

1. At $T_{\text{amb}} \leq +130^{\circ}\text{C}$. For derating at $T_{\text{amb}} > +130^{\circ}\text{C}$, see Figure 1.
2. At $T_{\text{amb}} \leq +120^{\circ}\text{C}$. For derating at $T_{\text{amb}} > +120^{\circ}\text{C}$, see Figure 1.
3. R_n = rated resistance.
4. 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
	Para. 9.19, Permanence of Marking: Not applicable
Deviations from Lot Acceptance Tests (Chart V) 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
	Para. 9.19, Permanence of Marking: Not applicable
Marking of Tolerance on Resistance Value	The tolerance on resistance value may be marked using the actual numeric value (0.5% or 1%) instead of the specified code letter.
Marking of Traceability Information	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