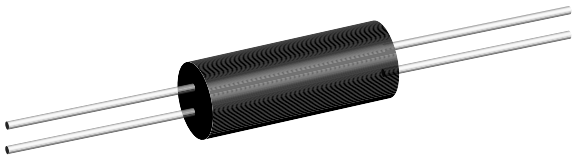
Wirewound Resistors, Molded Style, Current Shunts, Very Low Value, Four Terminal



FEATURES

- Molded four-terminal resistors for specialized applications
- Extremely low resistance values for current sensing applications
- Precision resistance tolerance
- Low temperature coefficients
- Complete welded construction

Pb Available

e3

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	HISTORICAL MODEL	POWER RATING (1) $P_{25\,°C}$ W	RESISTANCE RANGE Ω	TOLERANCE ± %	WEIGHT (typical) g
SPU050	SPU-50	1	0.001 to 0.060	1	2.5
SPU051	SPU-51	2	0.001 to 0.060	1	3.7
SPU052	SPU-52	4	0.001 to 0.200	1	4.8
SPU053	SPU-53	5	0.010 to 0.500	1	10.8

Notes

- Standard resistance tolerances available are 0.5 %, 1.0 %, 3.0 %, and 5.0 %.

(1) Wattage rating is limited to 25 A maximum

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	SPU MOLDED STYLE RESISTOR CHARACTERISTICS
Temperature Coefficient	ppm/°C	± 100 (- 10 °C to + 80 °C)
Dielectric Withstanding Voltage	V_{AC}	500 minimum
Short Time Overload	-	5 x power for 5 s, limited to 25 A maximum
Maximum Working Voltage	V	$(P \times R)^{1/2}$
Insulation Resistance	Ω	10 000 MΩ minimum dry
Operating Temperature Range	°C	SPU050 and SPU051 = - 55 to + 175, SPU052 and SPU053 = - 55 to + 275

GLOBAL PART NUMBER INFORMATION

Global Part Numbering example: SPU052R10000FD

S	P	U	0	5	2	R	1	0	0	0	0	F	D		

GLOBAL MODEL	RESISTANCE VALUE	TOLERANCE CODE	PACKAGING	SPECIAL
SPU050 **SPU051** **SPU052** **SPU053**	**L** = mΩ (below 0.01 Ω) **R** = Decimal **5L0000** = 0.005 Ω **R10000** = 0.10 Ω	**D** = ± 0.5 % **F** = ± 1.0 % **H** = ± 3.0 % **J** = ± 5.0 %	**E** (2) = Lead (Pb)-free, bulk **D** = Tin/lead, bulk	(Dash Number) (up to 2 digits) From **1 to 99** as applicable

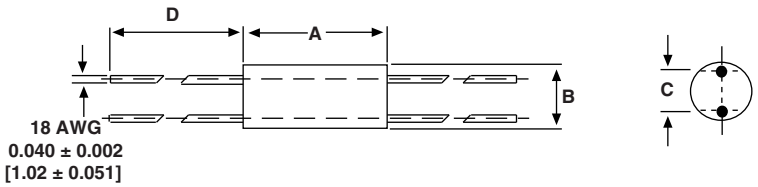
Historical Part Numbering example: SPU-52 0.1 Ω 1 % S51

SPU-52	0.100 Ω	1 %	S51
HISTORICAL MODEL	RESISTANCE VALUE	TOLERANCE CODE	PACKAGING

Note

(2) Lead (Pb)-free termination

DIMENSIONS in inches [millimeters]



GLOBAL MODEL	DIMENSIONS in inches [millimeters]			
	A	B	C	D
SPU050	0.660 ± 0.010 [16.76 ± 0.25]	0.312 ± 0.010 [7.92 ± 0.25]	0.200 ± 0.015 [5.08 ± 0.38]	1.000 + 0.25 - 0.125 [25.40 + 6.35 - 3.17]
SPU051	0.790 ± 0.010 [20.06 ± 0.25]	0.375 ± 0.010 [9.52 ± 0.25]	0.200 ± 0.015 [5.08 ± 0.38]	1.000 + 0.25 - 0.125 [25.40 + 6.35 - 3.17]
SPU052	1.000 ± 0.010 [25.40 ± 0.25]	0.375 ± 0.010 [9.52 ± 0.25]	0.125 ± 0.015 [3.17 ± 0.38]	1.000 minimum [25.40 minimum]
SPU053	1.870 ± 0.010 [47.50 ± 0.25]	0.437 ± 0.010 [11.10 ± 0.25]	0.125 ± 0.015 [3.17 ± 0.38]	1.000 minimum [25.40 minimum]

MATERIAL SPECIFICATIONS

Element: Nickel-chromium alloy or copper-manganese alloy, depending on resistance value

Molding Material: SPU050/051 thermo-set epoxy SPU052/053 thermo-set silicone

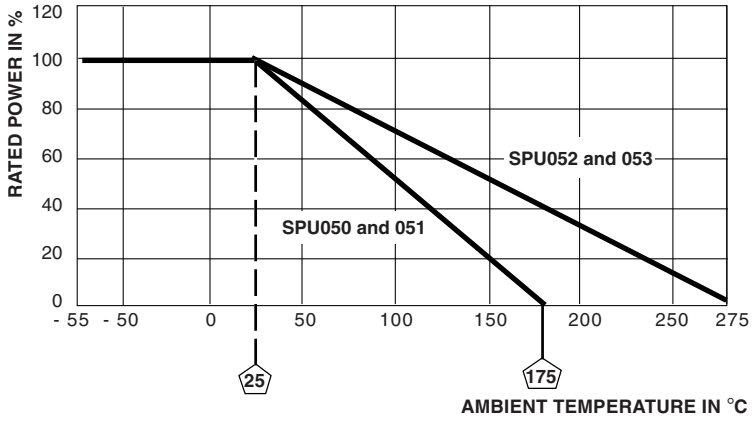
Standard Terminals: SPU050/051: 100 % Sn or 60/40 Sn/Pb coated Copperweld®
SPU052/053: 100 % Sn or 60/40 Sn/Pb coated copper

Part Marking: DALE, model, wattage, value, tolerance, date code

AMBIENT TEMPERATURE DERATING

Derating is required for ambient temperature above 25 °C per the following graph

DERATING



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- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

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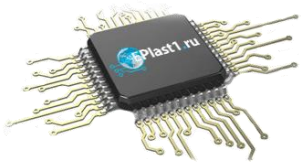
- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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