SKS

Vishay Draloric

Carbon Film Resistors, Fusible Type

FEATURES

- Fusible resistor for constant voltage designed for over load protection
- Special construction opens the resistor at a specified overload
- Non inflammable coating
- Defined switch-off behaviour

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	SIZE	POWER RATING $P_{70°C}$ W	TOLERANCE %	RESISTANCE RANGE Ω
SKS2	0207	0.30	5, 10	1R0 - 5K1
SKS3	0309	0.35	5, 10	1R0 - 5K1
SKS4	0414	0.50	5, 10	1R0 - 5K1
SKS5	0617	1.0	5, 10	1R0 - 5K1
SKS8	0922	1.3	5, 10	1R0 - 5K1

- $R_i \geq 6\Omega$ for $R_N < 10R$
  $R_i \geq 1\Omega$ for $R_N \geq 10R$
- Coating: red brown
- Marking: 5th band yellow

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	SKS2	SKS3	SKS4	SKS5	SKS8
Rated Dissipation at 70°C	W	0.30	0.35	0.50	1.0	1.3
Overload to Fuse	W	3.5	5.0	7.0	14.0	21.0
Time to Fuse (max)	sec.	40	40	70	80	100
Max. Permissible Voltage	V	See Diagram				
Voltage Coefficient	1 / V	$< 10^{-7}$	$< 10^{-7}$	$< 10^{-7}$	$< 10^{-7}$	$< 10^{-7}$
Current Noise	µV / V	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Thermal Resistance (max)	K/W	220	180	130	80	60
Thermal Time Constant	sec.	8	11	20	35	70
Category Temperature Range	°C	- 55 / +125				
Failure Rate	10^{-9}/h	< 30				
Weight	g	0.2	0.36	0.7	1.5	3.3

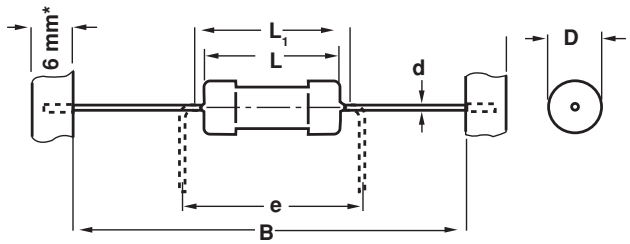
ORDERING INFORMATION

SKS2	100R	5%	A5
MODEL	RESISTANCE VALUE Ω	TOLERANCE	PACKAGING

For Technical Questions, contact ff1aresistors@vishay.com

Document Number 20138
Revision 31-May-01

DIMENSIONS



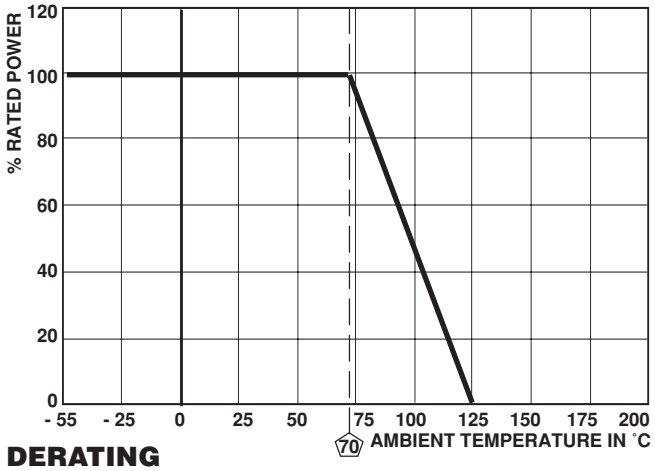
- Taping in acc. with IEC60286-1
- D and L measured in acc. with IEC60294
- d according to IEC60301

1)Also available in 26mm tape spacing

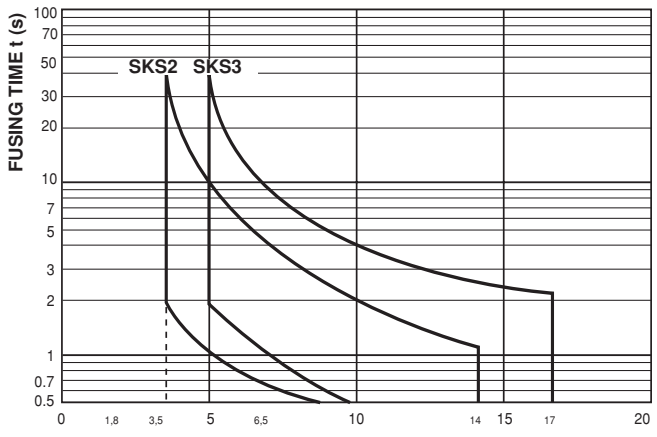
* 9mm for SKS5, SKS8

MODEL	DIMENSIONS in millimeters					
	D	L	L1max	B	d	e
SKS2	2.5 - 0.5	6.0 - 0.5	7.5	53 ± 1 1)	0.6	7.5
SKS3	3.2 - 0.5	8.5 - 1.0	10.0	53 ± 1	0.6	10
SKS4	4.1 - 0.5	12.0 - 1.5	15.0	73 ± 1	0.8	15
SKS5	6.0 - 0.5	16.5 - 1.5	17.5	77 ± 1	0.8	17.5
SKS8	9.0 - 0.5	20.0 - 1.5	22.5	77 ± 1	0.8	22.5

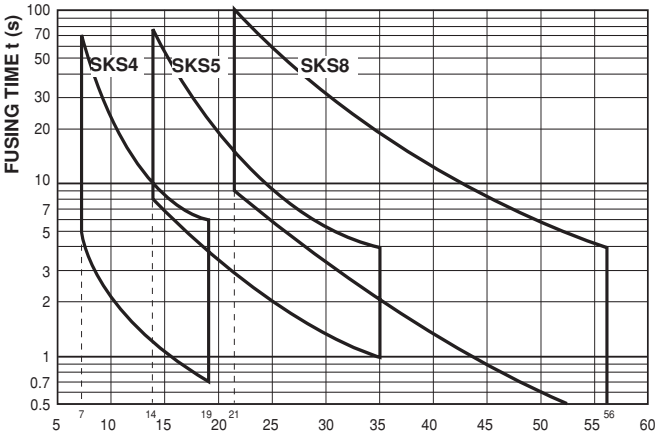
DERATING



FUSING TIME (AT U = CONSTANT)

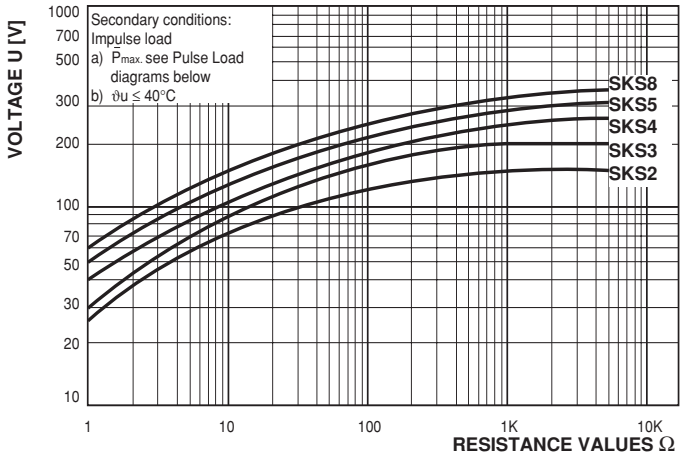


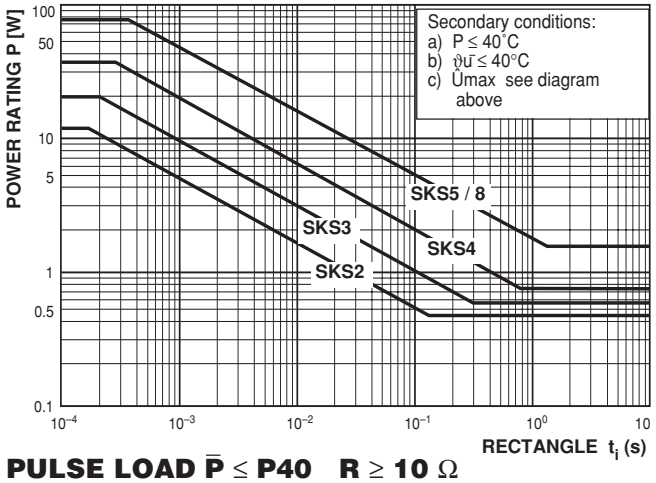
OPENING POWER P [W]
Calculated with rated resistance



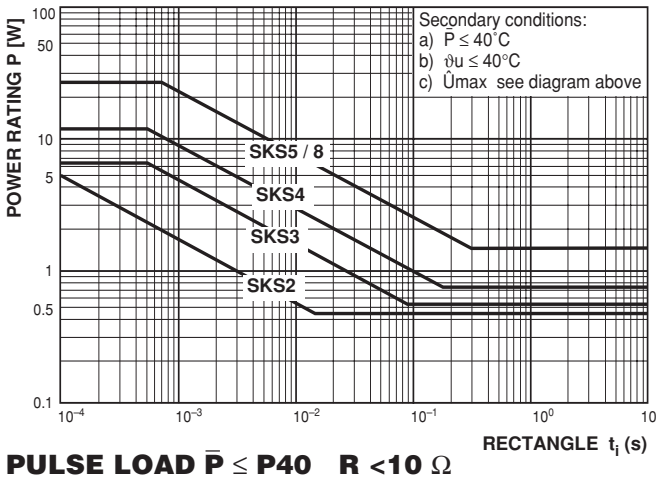
OPENING POWER P [W]
Calculated with rated resistance

APPROXIMATE VALUES FOR Û MAX IN CASE OF FAILURE AND MAX PULSE VOLTAGE

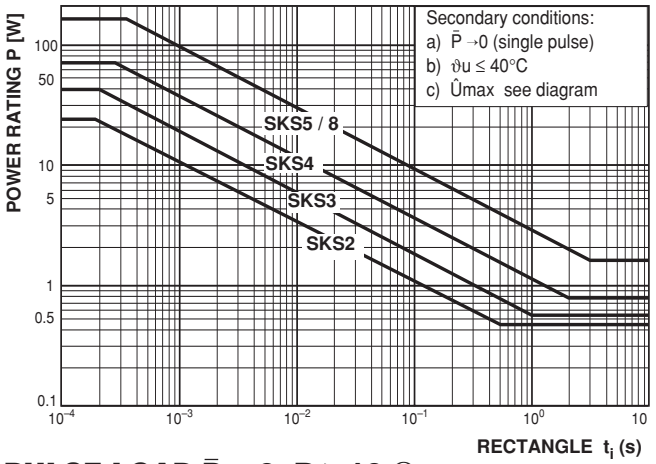




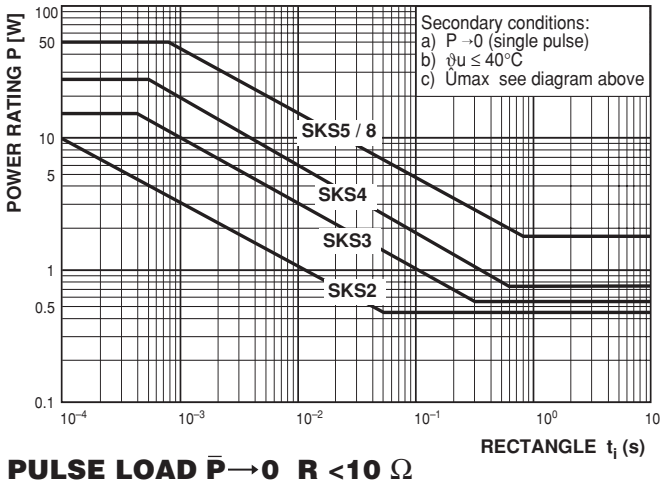
PULSE LOAD $\bar{P} \leq$ P40 R $\geq$ 10 Ω



PULSE LOAD $\bar{P} \leq$ P40 R <10 Ω



PULSE LOAD $\bar{P} \rightarrow 0$ R $\geq$ 10 Ω



PULSE LOAD $\bar{P} \rightarrow 0$ R <10 Ω

PERFORMANCE		
TEST	**CONDITIONS**	**RESULTS**
Voltage Coefficient	1 / V	$< 10^{-7}$
Ohmic Value after Fusing	Ω	$> 10 \times R_N$
Temperature Coefficient	10^{-6}/K	R < 10Ω: + 200; R ≥ 10Ω:- 300.. - 500
Non-Linearity	dB	SKS1 = 90; SKS2 to 8 =100
Damp Heat steady state	56 days, 40°C, 90-95% humidity	≤ 1%