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Single Inline Resistor Network

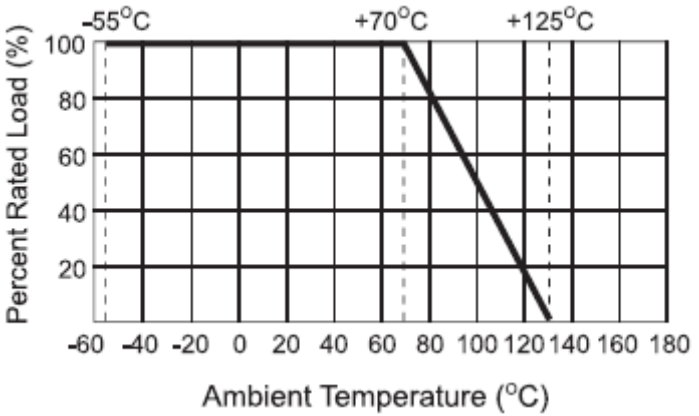
Performance Specifications

Temperature Coeffizient	50Ω ~ 1,0MΩ +/-200PPM/°C <50Ω & 1,0MΩ +/-250PPM/°C
Short Time Overlaod	.+/-(0,5% +0,1Ω)Max.
Insulation Resistance:	Min 10000Mega Ω
Dielectric Withstanding Voltage	No evidence of Flashover, mechanical damage, arcing or insulation breackdown
Terminal Strength	.+/-(0,5% +0,1Ω) max.
Resistance to Soldering Heat	.+/-(0,5% +0,1Ω) max.
Solderability	Min. 95% coverage
Temperature Cycling	.+/-(0,5% +0,1Ω) max.
Humidity (Steady State)	.+/-(0,5% +0,1Ω) max.
Load Life in Humidity	.+/-(3,0% +0,1Ω) max.
Load Life	.+/-(3,0% +0,1Ω) max.
Standard Operating Temperature	. -55°c ~ +155°C
Tolerance Informations	E24 Series 2% / 5% / 10%

Features

Small Size and light weight
Suitable for both flow and reflow soldering
Reduction of assembly costs

Dearting Curve



Test Methods of JIS 5201-1

Flame Retardant: (JIS 5201-1 7.12)	Resistor shall resist flamming or arcing when overloaded up to 16 times RCWV or max. RCWV whichever is lesser. Lit burner and adjust to procedure a blue flame 38mm in height & a max. 127mm flame from the burner tube. Resistor is supported from ist lead at 45°C from the horizontal so that the lower end of resistor is on the top of blue flame. The resistor is placed on this test flame for 15sec. Keep cool for 15sec. Repeat this procedure for 5 times.

SINGLE INLINE Resistor Network 9Pin 8xResistor

Part No.: **X31019**

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	12.03.2011
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Temperature Coefficient (JIS C 5201-1 4.8)	Natural Resistance change per temperature degree centigrade R1: Resistance value at room temperature (t1) R2: Resistance value at room temperature plus 100°C (t2) Test pattern: Room temperature (t1), Room temperature +100°C (t2)
Short time overload (JIS C5201-1 4.13)	Permanent resistance change after application of a potential of 2,5 times RCWV for 5sec.
Insulation resistance (JIS-C 5201-1 4.6)	Apply 500VDC between protective coating and termination for 1min. Then measure 100V DC specially for resistor network.
Dielectric Withstanding Voltage (Voltage proof) (JIS-C 5201-1 4.7)	Resistors shall be clamped in the method use a metal foil shall be wrapped closely around the body of the resistor. After that shall be tested at AC potentialrespectively specified in the given list of each product type for 60 +10/0 secs. For cement fixed resistors, the testing voltage is 1000Volts. For Chip resistors, testing voltage is 500 Volts.
Pulse Overload (JIS-5202 5.8)	Resistance change after 10.000 cycles (1sec "ON", 25sec "OFF") at 4times of RCWV or maximum overload:
Terminal Strength (JIS-5201-1 4.16)	**Direct Load**: Resistance to a 2,5Kgs.. Direct load for 10sec in a direction of the longitudinal axis of terminals leads. **Twist Test.** Terminal leads shall be bent trough 90° at the point of about 6mm grom the body of the resistor and shall be rotated trough 360° about the original axis of the bent terminal in alternating direction for a total of 3 rotations.
Terminal Strength (JIS-5201-1 4.16)	(Applicable for Resistor Network) Tensile: 1KG., 30sec., Bending: 500g, 2 times
Terminal Strength (JIS-5201-1 4.33)	(Applicable for CHIP Resistors) Twist of the test board: X/Y = 3/90mm for 10sec.
Vibration (JIS-5201-1 4.22)	X, Y, Z, each direction 2 hours, 10~55 ~ 10Hz / min. All amplitude 1,5mm
Soldering Heat (JISC 5201-1 4.18)	(Applicable for Chip Resistors) Dip the resistor into a solder bath having a temper. of 260 +/-5°C and hold it for 10 +/-1sec. **Lead(Pb) free temp**.:260 +/-3°C, 5 + 1/-0sec.
Resistance to Soldering Heat (JISC 5201-1 4.18)	Permanent Resistance change when leads immersed to a point 2.0 ~ 2,5mm from the body in 350 +/-10°C solder for 3-4 sec. **Lead (Pb) free temper**.: 260 +/-3°C, 5 + 1/-0sec.
Solderability (JISC 5201-1 4.17)	The area covered with a new, smooth clean , shiny and continious surface free from concentrated pinholes. Test temperature of solder: 235 +/-5°C; Dwell time in solder: 3~5sec. **Lead (PB) free temper.:** 245 +/-3°C; Dwell time in solder: 2~3sec.
Resistance to solvent (JIS5201-1 4.29 /4.30)	Specimens shall be immersed in a bath of alcohol completely for 3min. Using ultrasonic test equipment.
Thermal Shock (JIOS 5201-1 4.21)	(Applicable fir Resistor Network) Load V, rom temperature, 30min. Unload, -55°C, 15min. Over 2 hours in room temp. Before measuring.
Rapid Change Temperature: (JIS 5201-1 4.19)	Resistance change after continious 5cycles for duty cycle specified below: **Step1**: 30min.at -55 +/-3°C / **Step2**: 10~15min. At room temeprature. **Step3:** 30min. At 155 +/-2°C. **Step4:** 10~15min. At room temeprature.
Humidity (Steady Style) (JIS 5201-1 4.24)	Temporary resistance change after 240hours exposure in a humidity test chamber controlled at 40 +/-2°C and 50-95% relative humidity.
Load Life in Humidity (JIS 5201-1 7.9)	Resistance change after 1000hrs. (1,5hrs "ON", 0,5hrs "OFF" at RCWV or max. RCWV whichever is lesser in a humidity test chamber controlled at 40 +/-2°C and 90 ~ 95% relative humidity.
Load Life (JIS 5201-1 25.1)	Permanent Resistance change after 1000hours operating at RCWV or max. RCWV whichever is lesser, with duty cycles of 1,5hours "ON" 0,5hours "OFF" at 70 +/-2°C ambient.

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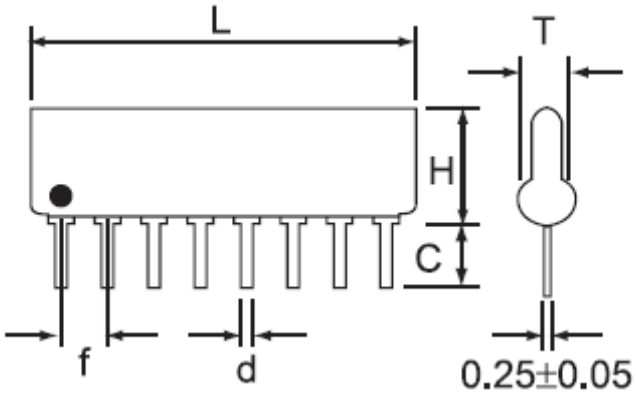
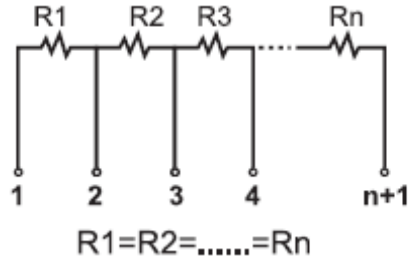
Technical Informations

Technical Dimensions

Type	L (max).	H max.	T max.	C +0,3/-0,2	d +/-0,1	f +/-0,1
9Pins	22,9	5,08	2,5	3,2	0,5	2,54



Physical Structure Type D



Electrical Specifications

Type	Power Rating at 70°C	Operating Temperature Range	Max. Working Voltage	Max. Overload Voltage	Dielectric Withstanding Voltage	Tolerance %	Resistance Range
D	0,125W	.-55°C ~ +125°C	100V	150V	200V	. +/-2%	10Ω ~ 1MΩ

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email: info@edcon-components.com

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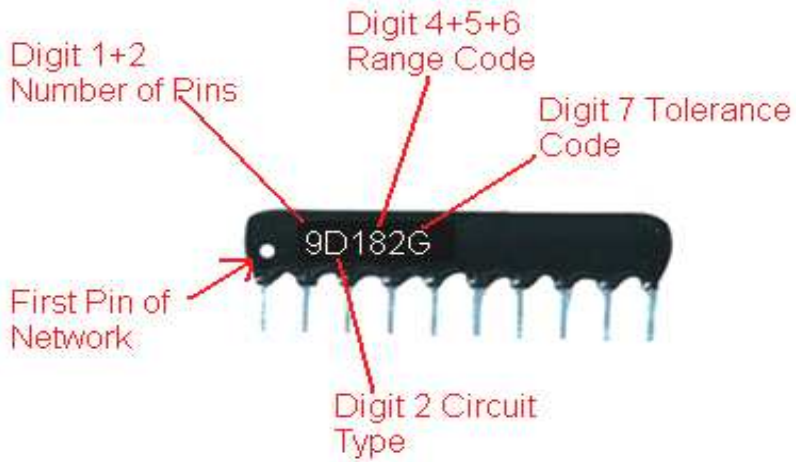
Range Table Row E12 we can deliver row E24 Please consult EDCON

	Code	Range	Code	Range	Code	Range	Code	Range	Code	Range	Code	Range	Code	Range	Code	Range	Code	Range	Code	Range	Code	Range	Code	Range
Ω	100	10Ω	120	12Ω	150	15Ω	180	18Ω	220	22Ω	270	27Ω	330	33Ω	390	39Ω	470	47Ω	560	56Ω	680	68Ω	820	82Ω
Ω	101	100Ω	121	120Ω	151	150Ω	181	180Ω	221	220Ω	271	270Ω	331	330Ω	391	390Ω	471	470Ω	561	560Ω	681	680Ω	821	820Ω
KΩ	102	1,0KΩ	122	1,2KΩ	152	1,5KΩ	182	1,8KΩ	222	2,2KΩ	272	2,7KΩ	332	3,3KΩ	392	3,9KΩ	472	4,7KΩ	562	5,6KΩ	682	6,8KΩ	822	8,2KΩ
KΩ	103	10KΩ	123	12KΩ	153	15KΩ	183	18KΩ	223	22KΩ	273	27KΩ	333	33KΩ	393	39KΩ	473	47KΩ	563	56KΩ	683	68KΩ	823	82KΩ
KΩ	104	100KΩ	124	120KΩ	154	150KΩ	184	180KΩ	224	220KΩ	274	270KΩ	334	330KΩ	394	390KΩ	474	470KΩ	564	560KΩ	684	680KΩ	824	820KΩ
MΩ	105	1,0MΩ																						

Thick Film Chip Resistor Tolerance 1% Range Code Body Marking



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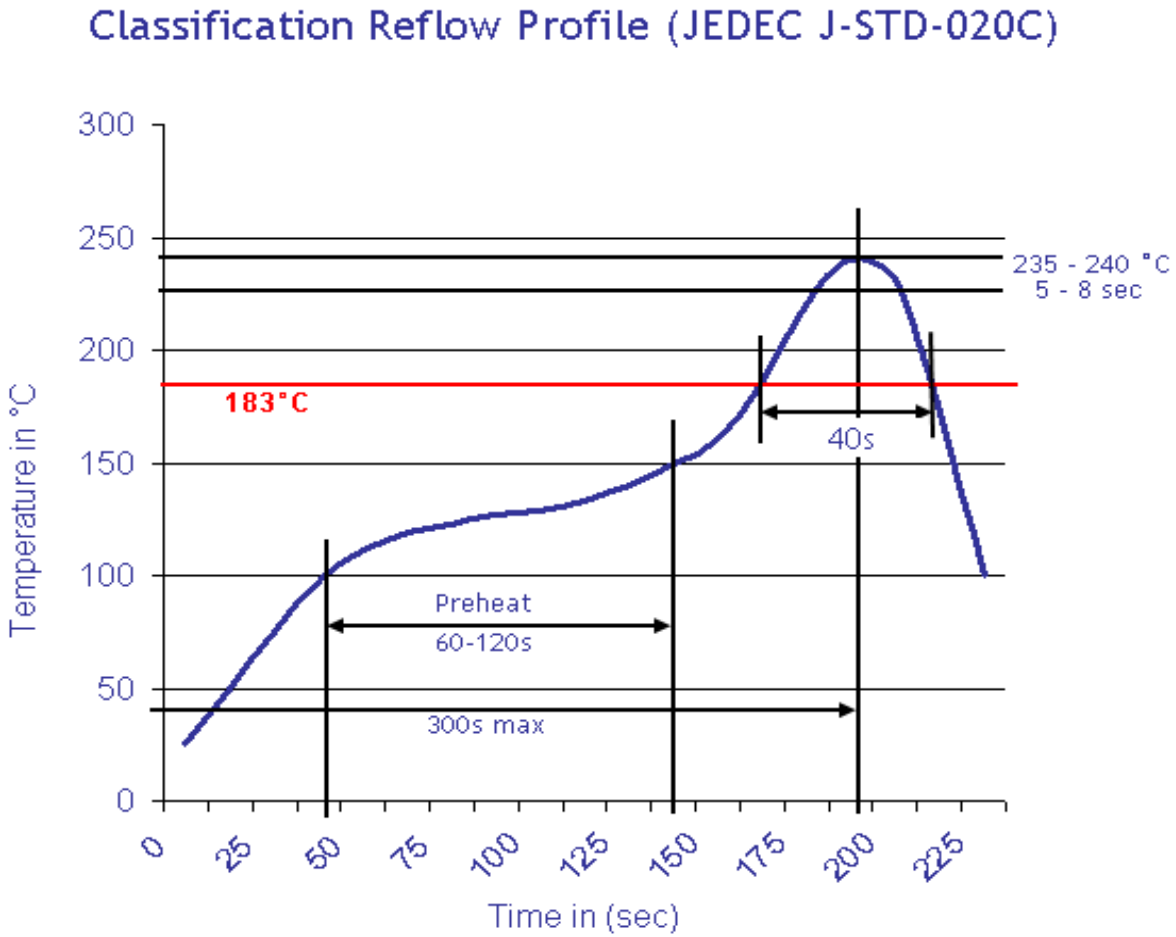
Soldering Profile Curve



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Ordering Information Table

Ordering Informations

Serie	Range Code	Circuit Style	Tolerance	ROHS	Packing Quantity					
X31019	**100**	**D**	**G**	**R**	**BU101**					

100= look Range Table	**D=** Circuit Type D	**G=** 2%	**R=** ROHS Conform	**BU101=** Bag w. 100PCS
		J= 5%	**N=** NON ROHS	

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