

SRR

(SIZES OTHER THAN SRI / SRP)

**KIYOSH SILICON
COATED WIRE
WOUND
RESISTOR WITH
RADIAL TAGS**

Features:

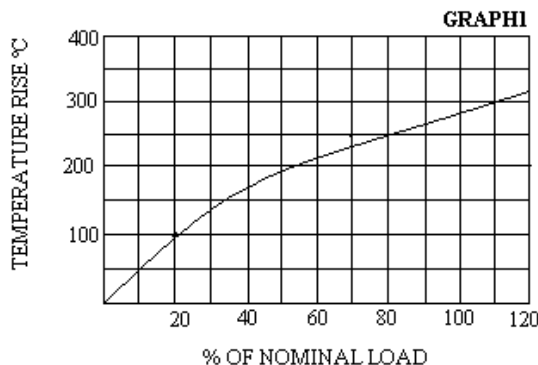
- Spot Welded Joints For Reliability
- Low Temperature Coefficient
- Exceptional Stability And Performance
- Low Surface Temperature
- Industrial And Professional Grade Available
- Non-Inductive Type Available
- Fixed Taps And Adjustable Tags Available
- Custom Designed Resistor Assemblies Are Available On Request
- Brackets Available For Horizontal as Well As Vertical Mounting.
- Flame Proof Silicon Coating Available.

SPECIFICATIONS:

- **OHMIC RANGE** : 0.1Ω To 300KΩ (Std. Resistances from E-24 Series. Other Resistances available on request).
- **TOLERANCE** : Standard-5%. (1%, 2% Available On Request)
- **POWER RATINGS (BASED ON 40° C)** : 5W To 600W (Higher wattage Available On Request)
 - Low Value : ±50ppm 0.1Ω to 9.1Ω
 - Middle Value : ±50ppm 10Ω to 910Ω
 - High Value : ±150ppm 1KΩ and above
- **TEMPERATURE COEFFICIENT** : Other ppm available on request
- **SURFACE TEMPERATURE** : 300° C max at 40° C
- **DERATE AT ZERO** : At 300° C for SRR series.
- **OVERLOAD** : 10 times the wattage applied for 5 seconds
- **OPERATING TEMPERATURE** : -55° C to 200° C
- **DIELECTRIC VOLTAGE** : Based on indicated creepage distance (k in table) from terminals to mounting bracket. 2 & 2.5mm:500V; 5mm: 1000V; 6mm: 1200V

MATERIALS USED

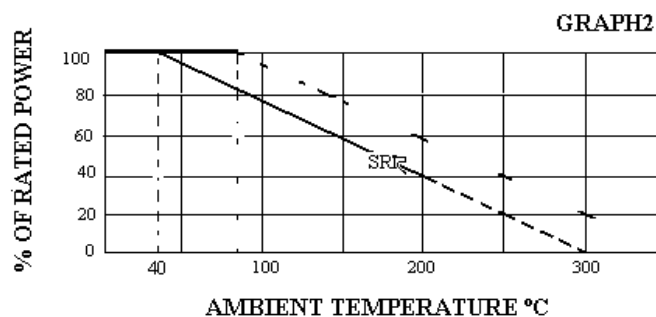
- **CORE** : Ceramic Core
- **TERMINALS** : Brass Terminals (SS Terminals And Brass Screw Nut Terminal On Request)
- **WIRE** : Cu-Ni Or Ni-Cr Alloy
- **COATING** : Silicon Varnish



TEMPERATURE RISE AT CONSTANT LOAD

MARKINGS EXAMPLE

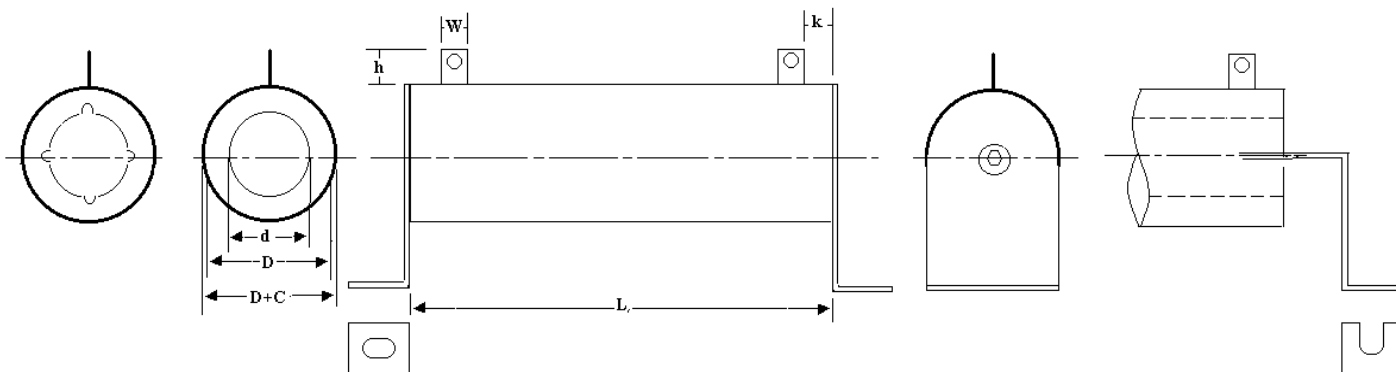
BRAND----- **KIYOSH 0428** -----DATE CODE
OHMIC VALUE -- **100E ±5 % 100W** -----WATTAGE
 \-----TOLERANCE
TYPE ----- **SRR-100 NI**-----NON INDUCTIVE
CODE NO -----**50667**



DERATING: 100% @ 40° C TO 0% @ 300° C FOR SRR

DERATING

- For Efficient And Long Life Operation, These Resistors Should Be Derated By More Than 50%.
- Operating Temperature Range -55 to +200°C.
- Derating Necessary For High Ambient Temperatures As Shown In Graph2



ELECTRICAL SPECIFICATIONS

DIMENSIONS in mm

INDUSTRIAL GRADE SERIES

WATTS AT 40°C	TYPE DESIGNATION	RESISTANCE RANGE	L ± 3	D ± 1	d min	D+C max	W ± 1	h ± 3	k min
10	SRR 10	0.1Ω - 68K	45	10	4	13	5	10	2
25	SRR 25	0.1Ω - 120K	50	14	7	17	6	15	2
30	SRR 30	0.1Ω - 150K	85	16	9	19	6	15	2.5
40	SRR 40	0.1Ω - 200K	115	16	9	19	6	15	2.5
50	SRR 50	0.1Ω - 250K	125	16	9	19	6	15	2.5
50	SRR 60	0.1Ω - 270K	115	19	12	22	6	15	2.5
60	SRR 70	0.1Ω - 300K	92	30	19	33	8	20	4
75	SRR 75	0.1Ω - 300K	100	30	19	33	8	20	4
100	SRR 100	1Ω - 300K	100	37	19	40	8	20	4
120	SRR 120	1Ω - 300K	120	37	19	40	8	20	4
150	SRR 150	1Ω - 300K	150	37	19	40	8	20	4
165	SRR 165	1Ω - 300K	165	37	19	40	8	20	4
200	SRR 200	1Ω - 300K	200	37	19	40	8	20	4
250	SRR 250	1Ω - 300K	250	37	19	40	8	20	4
225	SRR 265	1Ω - 300K	265	30	19	33	8	20	4
300	SRR 300	1Ω - 300K	250	45	32	50	10	25	5
400	SRR 400	1Ω - 300K	300	45	32	50	10	25	5
500	SRR 500	1Ω - 300K	300	60	35	54	10	25	5
600	SRR 600	1Ω - 300K	355	60	40	64	14	25	6

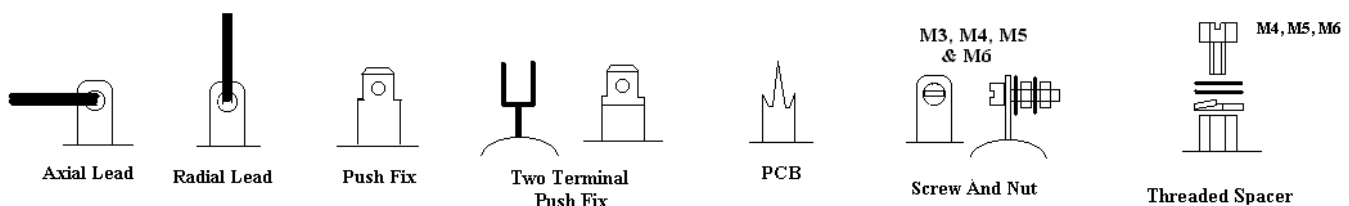
REV.1 on 03.07.19: 250 was 200 & 60 was 50

- The resistors with wattage and dimensions other than specified above can also be supplied.
- Lower as well as higher values than specified can also be supplied.
- Different types of load banks can also be designed as per the specifications required by the customer.
- A window can be provided on the resistor. A movable tag can be provided on the window so that the user can vary the resistance as desired.
- Non-inductive resistors can be manufactured on request, for use in high frequency circuits.
- Non-inductive resistances can be manufactured using Aryton-Perry type winding and Reverse Pi type winding.
- In addition to fixed type and adjustable type, fixed tapped resistors are also available for use as voltage dividers.
- Different terminals can be provided on the same ceramic core with different resistance values that act as separate resistors.
- The creepage distance, (k), Using a ceramic/mica washer for mounting can increase the creepage.

RECOMMENDATIONS FOR USE

MEASUREMENT	:	For low ohmic values, 4-wire measurement is recommended.
MOUNTING	:	(a) For horizontal mountings, (1) "L" shape brackets with stud nuts and washers available for all sizes. (2) "Z" shape brackets available for 100W to 250W. (b) For vertical mounting "Ω" shape brackets with stud nuts and washers available.
CABINET MOUNTING	:	(a) Unventilated box: Dissipation should be reduced using Graph 2. (b) Forced ventilation: If conditions are appropriate, dissipation can be doubled.
GROUP MOUNTING	:	In a still atmosphere a distance between axes should be equal to five to six times the resistor diameter.
GENERAL CONDITION	:	In any case the surface temperature at the hottest point should not exceed 275° c.
OVERLOAD	:	Heavy overloads can be endured in the form of short pulses for less than 0.1 seconds. Particular cases must be submitted to KIYOSH , specifying peak voltage, cycle, and environmental conditions.
ADJUSTABLE	:	<ol style="list-style-type: none"> 1. Very high values of resistance are not recommended for the adjustable type. 2. To move the adjustable band, the following steps must be followed. <ul style="list-style-type: none"> • Turn off the current in order to avoid operator injury and damage to the unit. • Loosen the band until it slides freely without touching the exposed wire in the window provided on the resistance. • Once the desired resistance has been achieved, tighten the band only slightly so as to get a firm contact on the wire. Tightening the band beyond this point may cause damage to the resistance. 3. Overloading to any section of the resistor can be avoided by not exceeding the maximum rated current. 4. The wattage rating as shown can be applied only when the entire resistance is connected. 5. The wattage rating on the resistor is directly proportional to the length of the resistor used.

Different types of terminals that can be provided on the resistor are shown below



Tel. No (+91-22) 66951951-52-53

KIYOSH ELECTRONICS

114, VEENA DALVAI INDUSTRIAL ESTATE, S. V. ROAD
JOGESHWARI (WEST), MUMBAI-400102

WEBSITE- www.kiyosh.in , e-mail- kiyosh@kiyosh.in