

FEATURES

- Superior thermal expansion cycling
- Inductance less than 10 nano-henries
- Flameproof
- Solderable pads: Tin (Sn) plate
- Lead flexible for thermal expansion
- Low termination stress ("J" leads)
- Shape provides cooler operation
- Custom values available

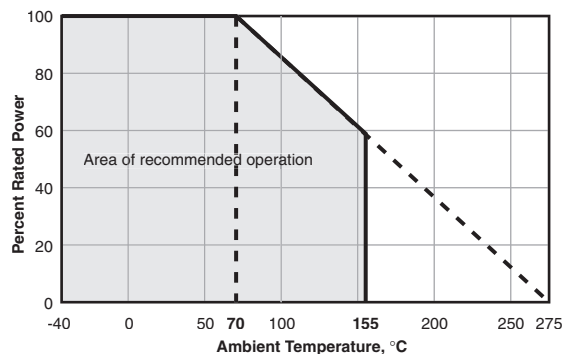
APPLICATIONS

- Current sensing
- Low inductance
- AC applications (please contact factory)
- Feedback
- Surge & pulse

Metal Plate Current Sense Resistors

Surface Mount Metal Alloy Resistor 60S Series

DERATING

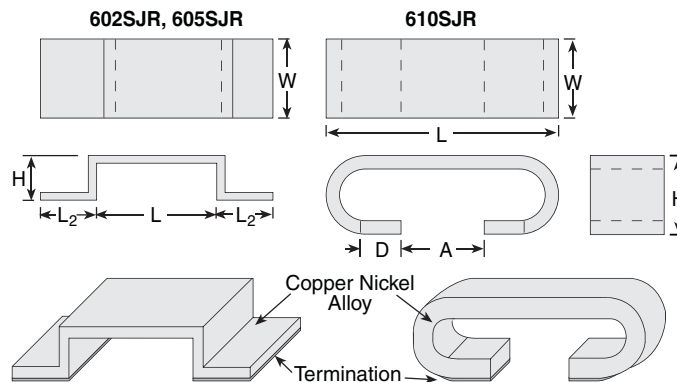


PERFORMANCE CHARACTERISTICS

| Parameter | Requirement | Test Method (JIS C 5202) |
|---------------------------|----------------------------|---|
| Resistance | Within regulated tolerance | 25°C |
| T.C.R. | Within specified T.C.R. | Room temperature/100°C up |
| Resistance to Solder Heat | ±2.0% | 350°C ± 10°C, 3 seconds |
| Solderability | 95% coverage minimum | 235°C ± 5°C, 5 seconds |
| Moisture Resistance | ±3.0% | 40°C, 90 - 95% RH, 1000 hours, no load |
| Moisture Resistance | ±5.0% | Power rating x 1/10, 40°C, 90 - 95% RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle |
| Load Life | ±5.0% | Rating voltage, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle |

STOCK PART NUMBERS AVAILABLE

| Ohms | Wattage: | | |
|----------|----------------|---------------|---------------|
| | 0.25 watt | 0.5 watt | 1 watt |
| | Series: 602SJR | 605SJR | 610SJR |
| 0.00200Ω | | 605SJR00200-T | 610SJR00200-T |
| 0.00300Ω | 602SJR00300-T | | 610SJR00300-T |
| 0.00375Ω | | 605SJR00375-T | |
| 0.00500Ω | 602SJR00500-T | | |
| 0.00800Ω | | 605SJR00800-T | |



| Type | Tolerance | TCR (ppm/°C) | Power Rating (watts) | Resistance Range (Ω) | Rated Ambient Temp. (°C) | Operating Temp. Range (°C) |
|--------|-----------|--------------|----------------------|----------------------|--------------------------|----------------------------|
| 602SJR | ±5% | ±100 | 0.25 @ 25°C | 0.002-0.010 | +70°C | -40 - +155 |
| 605SJR | ±5% | ±100 | 0.5 @ 25°C | 0.002-0.005 | +70°C | -40 - +155 |
| 610SJR | ±5% | ±350 | 1 @ 70°C | 0.002-0.003 | +85°C | -40 - +155 |

DIMENSIONS inches (mm)

| | L | L2 | H | W |
|--------|-----------------------------|---------------------------|----------------------|-----------------------------|
| 602SJR | 0.39 ± .008 (10.0 ± 0.2) | 0.018 ± .008 (2 ± 0.2) | 0.024 (0.6 ± 0.1) | 0.118 ± .008 (3.0 ± 0.2) |
| 605SJR | 0.39 ± .008 (10.0 ± 0.2) | 0.018 ± .008 (2 ± 0.2) | 0.079 (2 max.) | 0.20 ± .008 (5.2 ± 0.2) |

| | L | H | D | A | W |
|--------|-----------------------------|-----------------------------|-------------------------------|-----------------------------|------------------------------|
| 610SJR | 0.44 ± .016 (11.2 ± 0.4) | 0.137 ± .016 (3.5 ± 0.4) | 0.095 ± .010 (2.35 ± 0.25) | 0.189 ± .030 (4.8 ± .75) | 0.126 ± .016 (3.2 ± 0.40) |

ORDERING INFORMATION

602SJR0100-T

| | | | |
|---------------------|-----------|--------------------------------------|---------------------------------|
| Type & Power Rating | Tolerance | Ohms | Terminal Type |
| J = 5% | J = 5% | R00200 = 0.00200 R00375 = 0.00375 | T = tape and reel (optional) |

(continued)

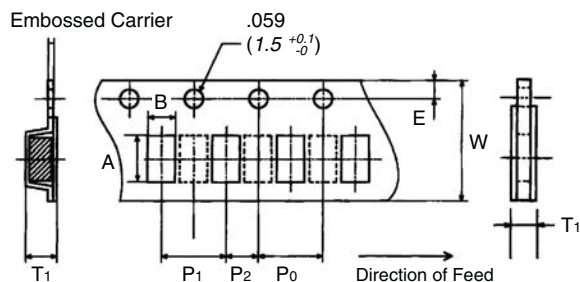
Metal Plate Current Sense Resistors

Surface Mount Metal Alloy Resistor

60S Series

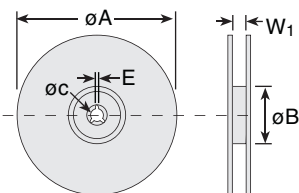
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PACKAGING SPECIFICATIONS



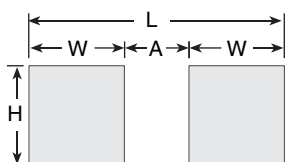
TAPE inches (mm)

| Type | A | B | E | W | P0 | P1 | P2 | T1 |
|--------|-----------------------|----------------------|-----------------------|-----------------------|----------------------|----------------------|----------------|----------------------|
| 602SJR | 0.057 (1.45 ± 0.2) | 0.134 (3.4 ± 0.2) | 0.069 (1.75 ± 0.1) | 0.079 (2.0) | 0.157 (4.0 ± 0.1) | 0.315 (8.0 ± 0.1) | 0.079 (2.0) | 0.098 (2.5 ± 0.2) |
| 605SJR | 0.057 (1.45 ± 0.2) | 0.224 (5.7 ± 0.2) | 0.069 (1.75 ± 0.1) | 0.079 (2.0) | 0.157 (4.0 ± 0.1) | 0.315 (8.0 ± 0.1) | 0.079 (2.0) | 0.091 (2.3 ± 0.2) |
| 610SJR | 0.461 (11.7 ± 0.1) | 0.169 (4.3 ± 0.1) | 0.069 (1.75 ± 0.1) | 0.945 (24.0 ± 0.2) | 0.157 (4.0 ± 0.1) | 0.315 (8.0 ± 0.1) | 0.079 (2.0) | — |



REEL inches (mm)

| Type | A | B | C | E | W1 | qty./reel |
|--------|----------------------|---------------------|-----------------------|----------------------|---------------------|-----------|
| 602SJR | 10.0 | 3.15 | 0.511 | 0.079 | 1.0 | 2000 |
| 605SJR | (255 +0.0 -3.0) | (80 +1.0 -0) | (13.0 ±0.2) | (2.0 ±0.5) | (25.5 ± 2.0) | |
| 610SJR | 12.99 (330 ± 2.0) | 3.94 (100 ± 2.0) | 0.511 (13.0 ± 0.2) | 0.079 (2.0 ± 0.5) | 1.0 (25.5 ± 2.0) | 1500 |



PAD inches (mm)

| Type | L | W | H | A |
|--------|--------------|--------------|--------------|--------------|
| 602SJR | 0.622 (16.0) | 0.118 (3.0) | 0.150 (3.8) | 0.394 (10.0) |
| 605SJR | 0.622 (16.0) | 0.118 (3.0) | 0.236 (6.0) | 0.394 (10.0) |
| 610SJR | 0.369 (9.36) | 0.121 (3.07) | 0.142 (3.60) | 0.127 (3.22) |