

60S Series

Surface Mount Metal Plate Current Sense



FEATURES

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

APPLICATIONS

- Current sensing
- Low inductance
- AC applications
- Feedback

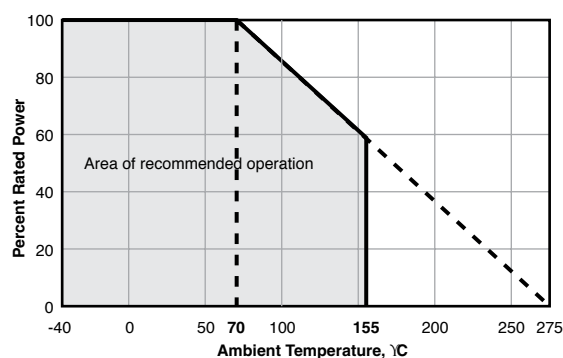
SERIES SPECIFICATIONS

Type	Tolerance	TCR (ppm/°C)	Power Rating (watts)	Resistance Values (Ω)	Rated Ambient Temp. (°C)	Operating Temp. Range (°C)	Qty./ Reel
602SJR	±5%	±100	0.25	0.003, 0.005	+70°C	-40 - +155	2000
605SJR	±5%	±100	0.5	0.002, 0.0375, 0.005, 0.008	+70°C	-40 - +155	2000
610SJR	±5%	±350	1	0.002, 0.003	+85°C	-40 - +155	1500

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

Derating



60S Series

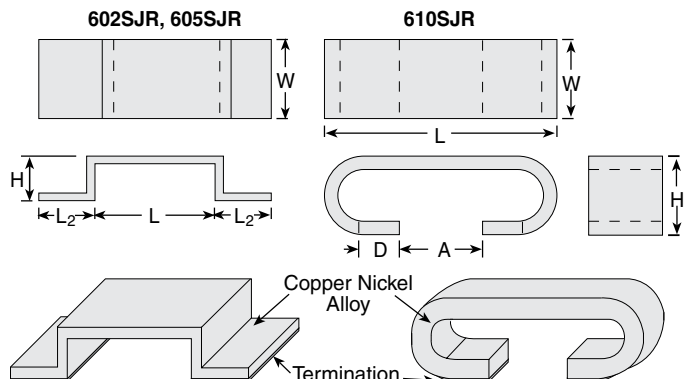
Surface Mount Metal Plate Current Sense

DIMENSIONS

inches (mm)

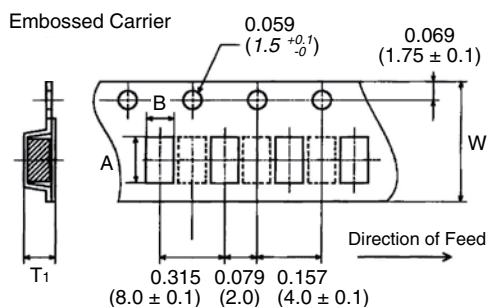
	L	L2	H	W
602SJR	0.39 ± .008 (10.0 ± 0.2)	0.018 ± .008 (2 ± 0.2)	0.024 (0.6 ± 0.1)	0.118 ± .008 (3.0 ± 0.2)
605SJR	0.39 ± .008 (10.0 ± 0.2)	0.018 ± .008 (2 ± 0.2)	0.079 (2 max.)	0.20 ± .008 (5.2 ± 0.2)

	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)



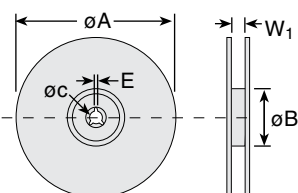
PACKAGING SPECIFICATIONS

inches (mm)



Tape

Type	A	B	W	T1
602SJR	0.057 (1.45 ± 0.2)	0.134 (3.4 ± 0.2)	0.079 (2.0)	0.098 (2.5 ± 0.2)
605SJR	0.057 (1.45 ± 0.2)	0.224 (5.7 ± 0.2)	0.079 (2.0)	0.091 (2.3 ± 0.2)
610SJR	0.461 (11.7 ± 0.1)	0.169 (4.3 ± 0.1)	0.945 (24.0 ± 0.2)	—



Reel

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	3.94	0.511	0.079	1.0	1500
	(330 ± 2.0)	(100 ± 2.0)	(13.0 ± 0.2)	(2.0 ± 0.5)	(25.5 ± 2.0)	

Land pattern

Type	M	N	O	L
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)

Land pattern dimensions are for reference only

ORDERING INFORMATION

Standard Part Numbers for 60S Series

	Wattage:	0.25 watt	0.5 watt	1 watt
Ohms	Series:	602SJR	605SJR	610SJR
0.00200Ω			605SJR00200E-T	610SJR00200E-T
0.00300Ω		602SJR00300E-T		610SJR00300E-T
0.00375Ω			605SJR00375E-T	
0.00500Ω		602SJR00500E-T	605SJR00500E-T	
0.00800Ω			605SJR00800E-T	

RoHS Compliant			
602SJR00300E-T			
Type & Power Rating	Tolerance	Ohms	Packaging
602S = 0.25 watt	J = 5%	R00200 = 0.00200Ω	T = tape and reel (optional)
605S = 0.5 watt		R00300 = 0.00300Ω	
610S = 1 watt		R00375 = 0.00375Ω	

Mouser Electronics

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[605SJR00200-T](#) [605SJR00800-T](#) [605SJR00375-T](#) [605SJR00200](#) [610SJR00200-T](#) [605SJR00500](#) [610SJR00300](#)
[602SJR00500-T](#) [610SJR00200](#) [605SJR00375E](#) [605SJR00800E](#) [605SJR00200E](#) [610SJR00300E](#) [602SJR00500E](#)
[610SJR00200E](#) [602SJR00300E-T](#) [602SJR00500E-T](#) [605SJR00200E-T](#) [605SJR00375E-T](#) [605SJR00500E-T](#)
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