

Features

- ◆ Anti-sulfur Corrosion (抗硫化腐蝕)
- ◆ Resistance Range: 1Ω ~ 10MΩ (電阻範圍廣選用性強)
- ◆ High Precision Tolerance: ±0.1%. (高精密誤差率 ±0.1%)
- ◆ High Power Small size and light weight (大功率小型化和重量輕)
- ◆ Reliability, high quality and fast delivery (可靠,高品質和產期快捷.)
- ◆ High Power Range: 1/4W(0603) ~ 3W(2030) (貼片型小型化功率大)
- ◆ Reduction of assembly costs and matching with placement machines (採用精密機器降低生產運作成本)

Figure



Fig-1

Application

- ◆ Appliance: Air conditioner, Refrigerator (冷氣機電子電路控制板及電冰箱)
- ◆ Motor Vehicle and industrial use electrical products (汽車及工業用電子產品)
- ◆ Computer & relative products: Main board, PDA (電腦及相關產品:主板、PDA.)
- ◆ Communication equipment: Cell phone, Fax machine (通訊設備:手機、傳真機)
- ◆ Power equipment: Power supply, Illumination equipment (電力設備:電源、照明設備)
- ◆ Entertainment: Stereo, TV tuners, Tape recorder (娛樂:立體音響、電視選配器、錄音器)
- ◆ Measuring instrument: Electric meter, Navigation equipment (測量工具:電動米、導航設備)

ORDERING INFORMATION

Example: S-ASC25FE1002 (1W 2512 ±1% ±100ppm 10KΩ)

Power Code	Power	Size	Type	Tolerance	TCR(°C)	Resistance		Packing/7" *
						E24	E96	
Y	1/16W	0402	Y-ASC02	B = ±0.1%	E=±100ppm			10K Reel
X	1/10W	0603	X-ASC03	C = ±0.25%	K=±150ppm	1R = 1R0	1R = 1R00	5K Reel
W	1/8W	0805	W-ASC05	D = ±0.5%	F=±200ppm	10R = 100	10R = 10R0	5K Reel
V	1/4W	1206	V-ASC06	F = ±1%	G=±300ppm	100R = 101	100R = 1000	5K Reel
O	1/3W	1210	O-ASC10	G = ±2%	H=±400ppm	1K = 102	1K = 1001	5K Reel
U	1/2W	1812	U-ASC12	H = ±3%	I=±500ppm	10K=103	10K=1002	4K Reel
U	1/2W	2010	U-ASC20	J = ±5%	J=±600ppm	100K=104	100K=1003	4K Reel
S	1W	1218	S-ASC18	K = ±10%		1M = 105	1M = 1004	4K Reel
S	1W	2512	S-ASC25			10M=106	10M=1005	4K Reel
Q	2W	2030	Q-ASC30					1K Reel
N	3W	2030	N-ASC30					1K Reel

Packing* The packing of reel update quantity please contact us.

DIMENSIONS

Unit: mm

Power Code	Power	Size	Type	L	W	H	D ₁	D ₂	Figure
Y	1/16W	0402	Y-ASC02	1.00±0.10	0.50±0.05	0.30±0.05	0.15±0.10	0.20±0.10	Fig-2
X	1/10W	0603	X-ASC03	1.60±0.20	0.80±0.15	0.40±0.10	0.20±0.10	0.30±0.10	
W	1/8W	0805	W-ASC05	2.00±0.20	1.25±0.15	0.50±0.15	0.30±0.15	0.40±0.10	
V	1/4W	1206	V-ASC06	3.05±0.10	1.60±0.20	0.55±0.15	0.40±0.18	0.50±0.15	
O	1/3W	1210	O-ASC10	3.05±0.10	2.50±0.20	0.55±0.15	0.50±0.18	0.50±0.15	
U	1/2W	1812	U-ASC12	4.50±0.10	3.00±0.10	0.55±0.05	0.55±0.18	0.70±0.20	
U	1/2W	2010	U-ASC20	5.00±0.20	2.50±0.20	0.55±0.10	0.60±0.20	0.60±0.20	Fig-3
S	1W	1218	S-ASC18	3.10±0.10	4.60±0.10	0.55±0.05	0.40±0.20	0.50±0.20	
S	1W	2512	S-ASC25	6.30±0.30	3.20±0.20	0.55±0.10	0.60±0.20	0.60±0.20	Fig-2
Q	2W	2030	Q-ASC30	5.10±0.10	7.60±0.10	0.60±0.05	0.80±0.20	0.80±0.20	Fig-3
N	3W	2030	N-ASC30	5.10±0.10	7.60±0.10	0.60±0.05	0.80±0.20	0.80±0.20	

Fig-2

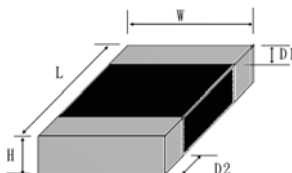
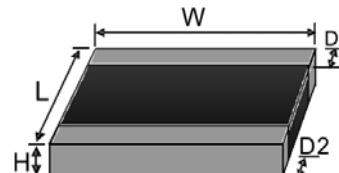


Fig-3





抗硫化腐蝕高精密貼片電阻
Power : 1/16W ~ 3W

ASC Series
Anti-Sulfur Corrosive Precision Chip Resistor

□ Standard Electrical Specification

Size	Part No. Type	Rated Power at 70°C	Maximum Voltage		Resistance Range & Tolerance Range			T.C.R. (ppm/°C)	Jumper Rated Current
			Working	Overload	±0.1%;±0.5%	±1%;±2%	±5%;±10%		
0402	Y-ASC02	1/16W	50V	100V	---	1Ω~9.9Ω	1Ω~9.9Ω	0~+400	0.5A
					---	10Ω~990Ω	10Ω~990Ω	±300	
					10Ω~1MΩ	1KΩ~10MΩ	1KΩ~10MΩ	±200	
0603	X-ASC03	1/10W	50V	100V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	1A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	
0805	W-ASC05	1/8W	150V	300V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	1A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	
1206	V-ASC06	1/4W	200V	400V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	2A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	
1210	O-ASC10	1/3W	200V	400V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	2A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	
1812	U-ASC12	1/2W	200V	400V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	2A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	
2010	U-ASC20	1/2W	200V	400V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	2A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	
1218	S-ASC18	1W	200V	400V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	2A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	
2512	S-ASC25	1W	200V	400V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	2A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	
2030	Q-ASC30	2W	200V	400V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	2A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	
2030	N-ASC30	3W	200V	400V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	2A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	

Operating Temperature Range: -55°C ~ 155°C

□ High Power Electrical Specification

Size	Part No. Type	Rated Power at 70°C	Maximum Voltage		Resistance Range & Tolerance Range			T.C.R. (ppm/°C)	Operating Temp. Range
			Working	Overload	±0.1%;±0.5%	±1%;±2%	±5%;±10%		
0603	W-ASC03	1/8W	50V	100V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	1A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	
0805	V-ASC05	1/4W	150V	300V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	1A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	
1206	U-ASC06	1/2W	200V	400V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	2A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	
1210	OA-ASC10	4/6W	200V	400V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	2A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	
1812	S-ASC12	1.0W	200V	400V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	2A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	
2010	S-ASC20	1.0W	200V	400V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	2A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	
1218	S-ASC18	2.0W	200V	400V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	2A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	
2512	Q-ASC25	2.0W	200V	400V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	2A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	
2030	N-ASC30	3.0W	200V	400V	---	1Ω~9.9Ω	10Ω~10MΩ	±400	2A
					---	---	10Ω~10MΩ	±200	
					10Ω~1MΩ	10Ω~10MΩ	---	±100	

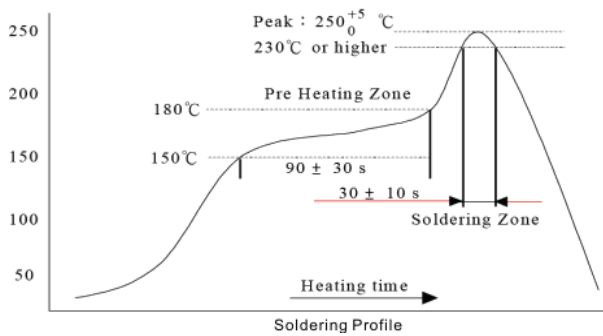
Operating Temperature Range: -55°C ~ 155°C



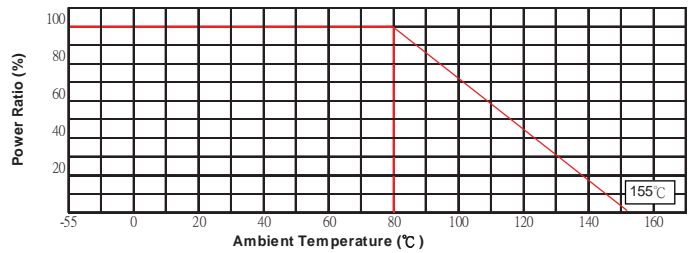
Test Prosecutes and Requirements

Test Item	Test Method	Procedure	Requirement
T.C.R.	JIS C 5201-1 clause 4.8	-55°C ~ 155°C, 20°C is the reference temperature	Refer to Rating
Short Time Overload	JIS C 5201-1 clause 4.13	General: 2.5 times RCWV or Max. Overload voltage for 5 seconds High Power: 2.5 times RCWV or Max. Overload voltage for 2 seconds	±1: ±(1%+0.05Ω) ±5: ±(2%+0.1Ω)
IR Reflow	Sony SS-00254	⁽¹⁾ Soldering Profile	±1: ±(1%+0.05Ω) ±5: ±(2%+0.05Ω)
Leaching	Sony SS-00254-9	260±5°C for 30 seconds.	>95% Coverage
Soldering Heat	JIS C 5201-1 clause 4.18	260±5°C for 10 seconds.	±1: ±(0.5%+0.05Ω) ±5: ±(1.0%+0.05Ω)
Temperature Cycling	JIS C 5201-1 clause 4.19	-55°C to +155°C, 5 cycles.	0.1%; 0.5%; 1% ±(0.5%+0.05Ω) 2%; 5% : (±2.0%+0.05Ω)
Electric Iron	Sony SS-00254-5	Preheating temperature: 350±10°C Electric iron preheating time: 3+1/-0 seconds	±1: ±(1%+0.05Ω) ±5: ±(1%+0.05Ω)
Resistance to Solvent	JIS C 5201-1 clause 4.29	The tested resistor be immersed into isopropyl alcohol of 20~25°C for 60 seconds, Then the resistor is left in the room for 48 hours.	±1: ±(0.5%+0.05Ω) ±1: ±(0.5%+0.05Ω)
Load Life in Humidity	JIS C 5201-1 clause 4.24	40°C ± 2°C, 90~95% R.H. or Max. working voltage for 100hours with 1.5hrs [ON] and 0.5 hrs [OFF].	0.1%; 0.5%; 1% ±(0.5%+0.05Ω) 2%; 5% : (±2.0%+0.05Ω)
Load Life (Endurance)	JIS C 5201-1 clause 4.25	70°C ± 2°C, or Max. working voltage for 1000 hours with 1.5 hours [ON] and 0.5 hours [OFF]	0.1%; 0.5%; 1% ±(1%+0.05Ω) 2%; 5% : (±3.0%+0.1Ω)
Terminal Bending Strength	JIS C 5201-1 clause 4.33	Bending once for 5 seconds D: ASC Series 0402; 0603; 0805 = 5mm D: ASC Series 1206; 1210; 1812 = 3mm D: ASC Series 1218; 2010; 2512 = 3mm	±1: ±(1.0%+0.05Ω) ±1: ±(1.0%+0.05Ω)
Insulation Resistance	JIS C 5201-1 clause 4.6	Maximum overload voltage for 1 minute.	≥ 10GΩ
Sulfur Test	ASTM-B-809-95	60°C ± 2°C, no power rating for 1000 hours	△R: ±(1.0%+0.05Ω)

⁽¹⁾ Soldering Profile



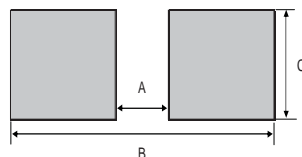
Power Derating Curve



Recommend Land Pattern Design (For Reflow Soldering)

Unit: mm

Type	ASC02	ASC03	ASC05	ASC06	ASC10	ASC12	ASC20	ASC18	ASC25	ASC30
Dim.	0402	0603	0805	1206	1210	1812	2010	1218	2512	2030
A	0.60	0.80	1.30	2.20	2.00	3.11	3.80	2.04	4.90	3.50
B	1.60	2.40	2.90	4.20	4.40	5.91	6.60	4.24	8.10	7.50
C	0.70	1.00	1.40	1.70	2.70	3.00	2.70	4.50	3.40	7.80



SINLOON®

抗硫化腐蝕高精密貼片電阻

Power : 1/16W ~ 3W

ASC Series

Anti-Sulfur Corrosive Precision Chip Resistor

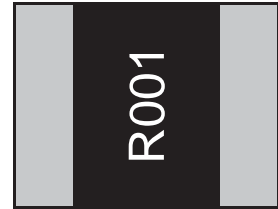
□ **Marking : Example**

Power Code	Power	Size	Type	Figure
Y	1/16W	0402	Y-ASC02	Fig-4
X	1/10W	0603	X-ASC03	
W	1/8W	0805	W-ASC05	
V	1/4W	1206	V-ASC06	
O	1/3W	1210	O-ASC10	
U	1/2W	1812	U-ASC12	
U	1/2W	2010	U-ASC20	Fig-5
S	1W	1218	S-ASC18	
S	1W	2512	S-ASC25	Fig-4
Q	2W	2030	Q-ASC30	Fig-5
N	3W	2030	N-ASC30	



Fig-4



Fig-5



□ **PACKAGE SPECIFICATION**

Power	Size	Type	Quantity(ea)				
			Paper Reel Tape	In Box	Carton		
1/16W	0402	Y-ASC02	10K pcs	7" Reel	100K pcs	600K pcs	 <p>品質承諾標誌 QUALITY COMMITMENT</p>
1/10W	0603	X-ASC03	5K pcs	7" Reel	50K pcs	300K pcs	
1/8W	0805	W-ASC05	5K pcs	7" Reel	50K pcs	300K pcs	
1/4W	1206	V-ASC06	5K pcs	7" Reel	50K pcs	300K pcs	
1/3W	1210	O-ASC10	5K pcs	7" Reel	50K pcs	300K pcs	
1/2W	1812	U-ASC12	4K pcs	7" Reel	40K Pcs	240K Pcs	
1/2W	2010	U-ASC20	4K pcs	7" Reel	40K Pcs	240K Pcs	
1W	1218	S-ASC18	4K pcs	7" Reel	40K Pcs	240K Pcs	
1W	2512	S-ASC25	4K pcs	7" Reel	40K Pcs	240K Pcs	
2W	2030	Q-ASC30	1K Pcs	7" Reel	10K pcs	60K Pcs	
3W	2030	N-ASC30	1K Pcs	7" Reel	10K pcs	60K Pcs	

Paper Reel Tape

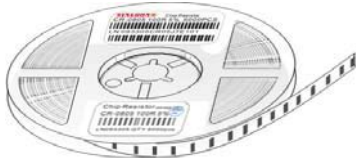


Fig-6

Reel Tape Label

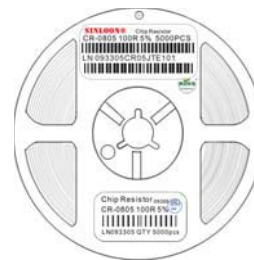


Fig-7

Carton Pack

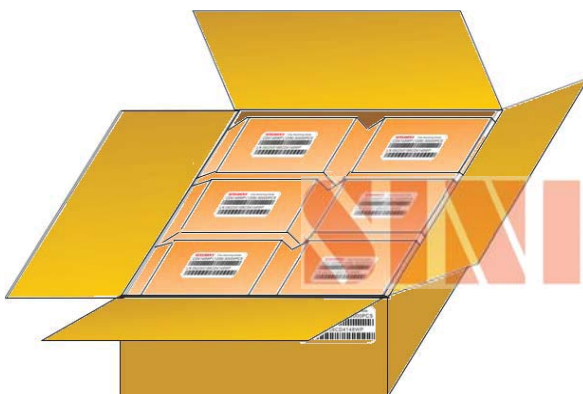


Fig-9

Inner Box

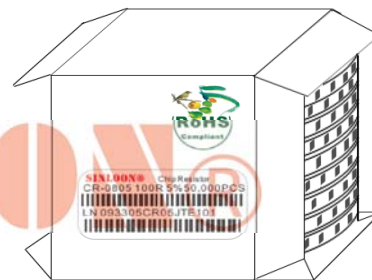


Fig-8

※美隆公司產品規格及其特性參數的改變或更新恕不另行通知。

※Mayloon characteristic parameters of electronic product specification changes or updates without notice to improve

