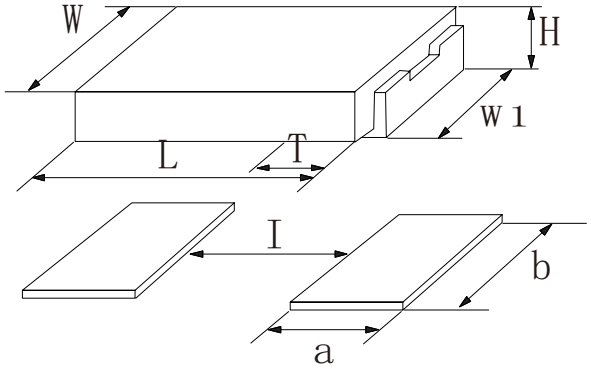
WSR Plastic-encased precision metal film strip chip shunts

Feature

Ⅰ Resistive element made of E-Beam welded Nickel-chrome or manganin
Ⅱ High strength,stability,reliability and excellent solderability
Ⅲ Low thermal EMF,very low inductance(0.5nH to 5nH)
Ⅳ Milded high temperature encapsulation
Ⅴ Proprietorial processing technique produce extremely low resistance velue
Ⅵ WSR5 improved the capbility of heat treatment in design

Dimensions



Applications

Ⅰ Ideal for functional power supply
Ⅱ Instruments
Ⅲ Circuit applications including current sensing sampling and power amplifiers,ect

Type	L	H	T	W	W1	a	b	i
WSR1	6.35±0.254	2.11±0.254	1.19±0.254	3.18±0.254	2.54±0.254	2.11	3.68	3.18
WSR2	11.56±0.813	2.41±0.127	2.54±0.254	6.98±0.254	5.46±0.127	3.94	5.84	5.21
WSR3	11.56±0.813	2.41±0.127	2.54±0.254	6.98±0.254	5.46±0.127	3.94	5.84	5.21
WSR5	11.56±0.813	2.41±0.127	2.54±0.254	6.98±0.254	5.46±0.127	3.94	5.84	5.21

Reference Standards

JIS C 5201-1

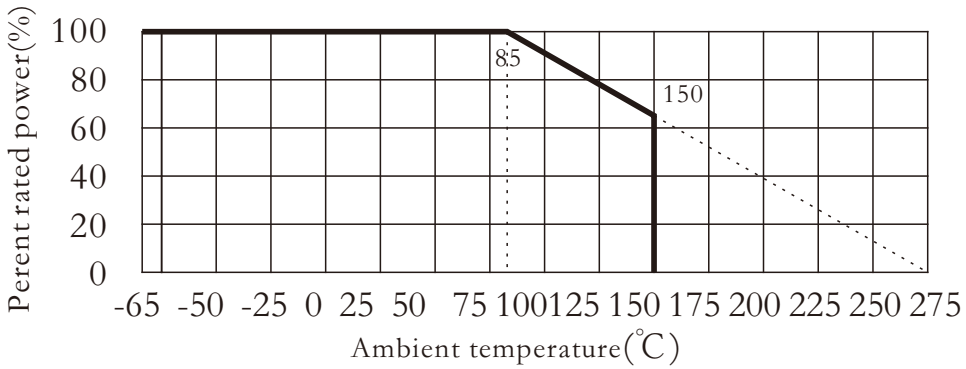
Ordering Information

例 example

WSR	2512	D	0.05mΩ	5W	C2
(1) Type	(2) Dimensions	(3) Resistance Tolerance	(4) Resistance	(5) Power	(5) T C R

(1)Type:WSR
(2)Style:2512,4527
(3)Resistance Tolerance:D=±0.5%, F=±1.0%
(4)Resistance:0.05mΩ
(5)Power:1W,2W,3W,5W
(6)T C R:±50ppm/℃

Derating Curve



Power and Resistance Etc

Type	Dimensions	Power rating(w)	Resistance range(Ω)		TCR (PPM/℃)	Insulationg voltage(VAC)	Insulationg resistance(Ω)	Weight/ 1000pcs(g)
			±0.5%	±1%				
WSR1	2512	1.0	0.01～0.1	0.001～0.1	±10 ±25 ±50 ±100	＞500	＞10^9	200
WSR2	4527	2.0	0.01～0.5	0.001～0.5		＞500	＞10^9	440
WSR3	4527	3.0	0.01～0.2	0.001～0.2		＞500	＞10^9	440
WSR5	4527	5.0	0.01～0.3	0.008～0.3		＞500	＞10^9	47^6

Performance

Test item	Spec fications	Test methods(JIS C 5201-1)
Thermal shock	ΔR≤ ±(0.5%R0+0.0005Ω)	-65℃/150℃,15min,1000cycles
Over load	WSR1/2:ΔR≤ ±(0.5%R0+0.0005) WSR3/5:ΔR≤ ±(2.0%R0+0.0005)	WSR1/2: 5P · R,5s WSR3/5: 4P · R,5s
low temperature storage	ΔR≤ ±(0.5%R0+0.0005)	-65℃,24h
Hige temperature storage	ΔR≤ ±(1.0%R0+0.0005)	275℃,1000h
Damp heat,steady storage	ΔR≤ ±(0.5%R0+0.0005)	40℃,RH93±3%,0.1P · R,1000h
Mechanical shock	ΔR≤ ±(0.5%R0+0.0005)	100g,6ms,5cycles
Vbrrtiong	ΔR≤ ±(0.5%R0+0.0005)	10～2000hHZ,12h
Load life	WSR1/2:ΔR≤ ±(1.0%R0+0.0005) WSR3/5:ΔR≤ ±(2.0%R0+0.0005)	70℃,P · R,1000h
Leaching	ΔR≤ ±(0.5%R0+0.0005)	+260℃,10s