CS5 Series

High Power Precision Current Sense



The CS5 is a high power precision current sensing resistor designed with four terminals. This resistor series is distinguished by excellent long term stability & TCR. The Kelvin connections allow high precision measurements even with low resistance values. The CS5 series has a non-inductive copper manganin element inserted into a cement sealed ceramic case.



FEATURES

- Values beginning at one miliohm
- Non Inductive Design
- Four terminal Kelvin connection



APPLICATIONS

- Power modules
- Frequency converters
- Switch mode power supplies

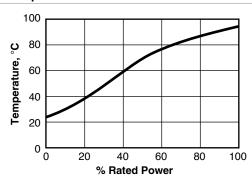
SERIES SPECIFICATIONS

Series	Power Rating (W)*	Resistance Range (m Ω)	Resistance Tolerance (%)	TCR (ppm/°C)
CS5	5W	1m, 2m, 3m, 4m	±0.5, ±1	±30ppm/°C

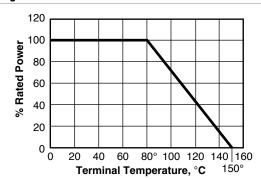
^{*} Max.current 60A at 1mΩ

CHARACTERISTICS						
Temperature Range	-25°C~+150°C	Test	Method	Max. ΔR		
Insulation Resistance	20MΩ min. at DC500V	Load Life	(1,000 hours at rated power at 70°C)	1.0%+0.05Ω max.		
Temp. Coefficient	30ppm/°C max.	Short Time Overload	(Mil-Std-202, Method 106, Cond. A)	0.5%+0.05Ω max.		
Dielectric Withstanding	AV 1500V for 1 minute	Stability	(Mil-Std-202, Method 107)	0.1%+0.05Ω max.		

Surface Temperature Increase Versus Power Load



Derating

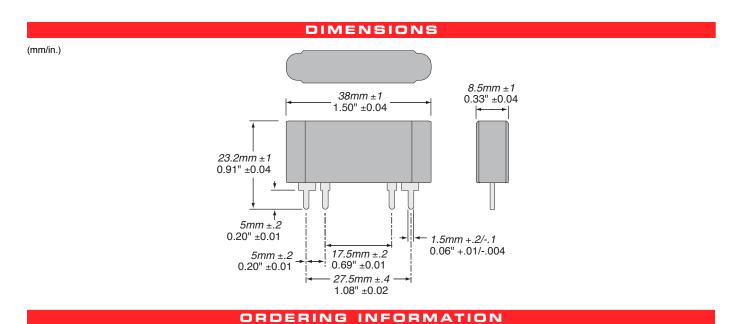


(continued)



CS5 Series

High Power Precision Current Sensing



$\underbrace{C~S~5~F~R~0~0~1}_{\text{Series Wattage Tolerance}}\underbrace{F~0.5\%}_{F~=~1\%}_{\text{Resistance}}\underbrace{E~\text{RoHS compliant Resistance}}_{\text{RoHS compliant Resistance}}$

for CS5 series					
1%	0.5%				
CS5FR001E	CS5DR001E				
CS5FR002E	CS5DR002E				
CS5FR003E	CS5DR003E				

CS5DR004E

CS5FR004E

Standard part numbers

X-ON Electronics

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Click to view similar products for Current Sense Resistors - Through Hole category:

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Other Similar products are found below:

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CPSL07R1000JB145 SR10-0.015-1% SR20-0.008-1% HPCR0402F12K0K9 HPCR0402F130RK9 HPCR0402F13K0K9

HPCR0402F17K4K9 HPCR0402F180KK9 HPCR0402F180RK9 HPCR0402F1K10K9 HPCR0402F220KK9 HPCR0402F220RK9

HPCR0402F24K0K9 HPCR0402F27K0K9 HPCR0402F2K00K9 HPCR0402F33K0K9 HPCR0402F430KK9 HPCR0402F4K30K9

HPCR0402F4K70K9 HPCR0402F680KK9 HPCR0402F680RK9 HPCR0402F390KK9 HPCR0402F39K0K9 HPCR0402F3K00K9

HPCR0402F560RK9 HPCR0402F2K70K9 HPCR0402F360KK9 HPCR0402F36K0K9 HPCR0402F3K00K9 HPCR0402F3K90K9

HPCR0402F430RK9 HPCR0402F43K0K9 HPCR0402F475KK9 HPCR0402F47K0K9 HPCR0402F51K0K9 HPCR0402F560KK9

HPCR0402F56K0K9 HPCR0402F5K10K9 HPCR0402F5K60K9 HPCR0402F620KK9 HPCR0402F620RK9 HPCR0402F68K0K9

HPCR0402F6K20K9 HPCR0402F6K80K9 HPCR0402F750KK9 HPCR0402F750RK9 HPCR0402F7K50K9 HPCR0402F820KK9

HPCR0402F82K0K9 HPCR0402F910KK9
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