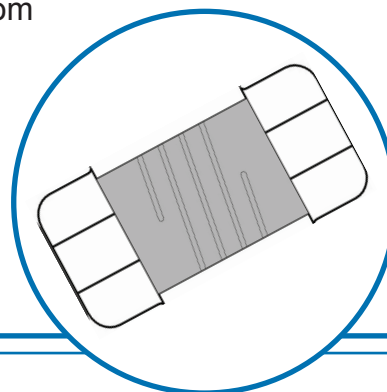


SMC SERIES



METAL GLAZETM GENERAL PURPOSE
SURFACE MOUNT, COMPLIANT TERMINAL

- Capped terminals provide mechanical compliance – relief from board vs component TCE mismatch
- Applications – Ideal for automotive and other harsh thermal applications
- Uncompromising MetalGlazeTM performance gives excellent surge performance
- Lead-free, RoHS compliant
- Use standard IRC 2512, 3610 solder pads



SMC SPECIFICATIONS:

Size Code	Industry Footprint	IRC Type	Maximum Power Rating	Working Voltage	Maximum Voltage	Resistance Range (Ω)	Tolerance ($\pm\%$)	TCR (ppm/ $^{\circ}\text{C}$)	Product Category
F	2512	SMC-1	1W @ 70°C	350	650	0.1 to 0.99	1,2,5	100	Low range
						1.0 to 2.0M	1,2,5	50,100	Standard
						20 to 348K	0.5,1,2,5	50, 100	Tight Tolerance
H	3610	SMC-2	2W @ 70°C	500	1000	0.1 to 0.99	1,2,5	100	Low Range
						1 to 2.0M	1,2,5	50,100	Standard

SMC PERFORMANCE CHARACTERISTICS

Characteristics	Maximum Change	Test Method
Temperature Coefficient	As specified	MIL-PRF-55342E Par 4.7.9 (-55°C +125°C)
Thermal Shock	$\pm 0.5\% + 0.01 \text{ ohm}$	MIL-PRF-55342E Par 4.7.3 (-65°C +150°C, 5 cycles)
Low Temperature Operation	$\pm 0.25\% + 0.01 \text{ ohm}$	MIL-PRF-55342E Par 4.7.4 (-65°C @ working voltage)
Short Time Overload	$\pm 0.25\% + 0.01 \text{ ohm}$ (R<-100K Ohm) $\pm 1\% + 0.01 \text{ ohm}$ (R<-100K Ohm)	MIL-PRF-55342E Par 4.7.5 (2.5 x SQRT (PXR) FOR 5 seconds)
High Temperature Exposure	$+0.5 + 0.01 \text{ ohm}$	MIL-PRF-55342E Par 4.7.6 (+150°C for 100 hours)
Resistance to Bonding	$\pm 0.25\% 0.01 \text{ ohm}$	MIL-PRF-55342E Par 4.7.7 (Reflow soldered to board at 260°C for 10 seconds)
Solderability	95% minimum coverage	MIL-STD-202, Method 208 (245°C for 5 seconds)
Moisture Resistance	$\pm 0.5\% + 0.01 \text{ ohm}$	MIL-PRF-55342E Par 4.7.8 (10 cycles, total 240 hours)
Life Test	$\pm 0.5\% + 0.01 \text{ ohm}$	MIL-PRF-55342E Par 4.7.10 (2000 hour at 70°C intermittent)
Terminal Adhesion Strength	$\pm 1\% + 0.01 \text{ ohm}$ no mechanical damage	1200 gram push from underside of mounted chip for 60 seconds
Resistance to Board Bending	$\pm 1\% + 0.01 \text{ ohm}$ no mechanical damage	Chip mounted in center of 90mm long board, deflected 5mm so as to exert pull on chip contacts for 10 seconds

General Note

IRC reserves the right to make changes in product specification without notice or liability.
All information is subject to IRC's own data and is considered accurate at time of going to print.

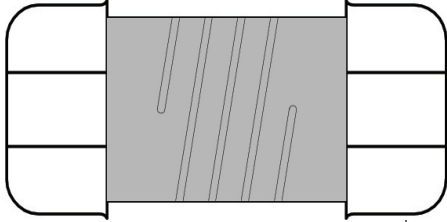
WIREWOUND AND FILM TECHNOLOGIES DIVISION

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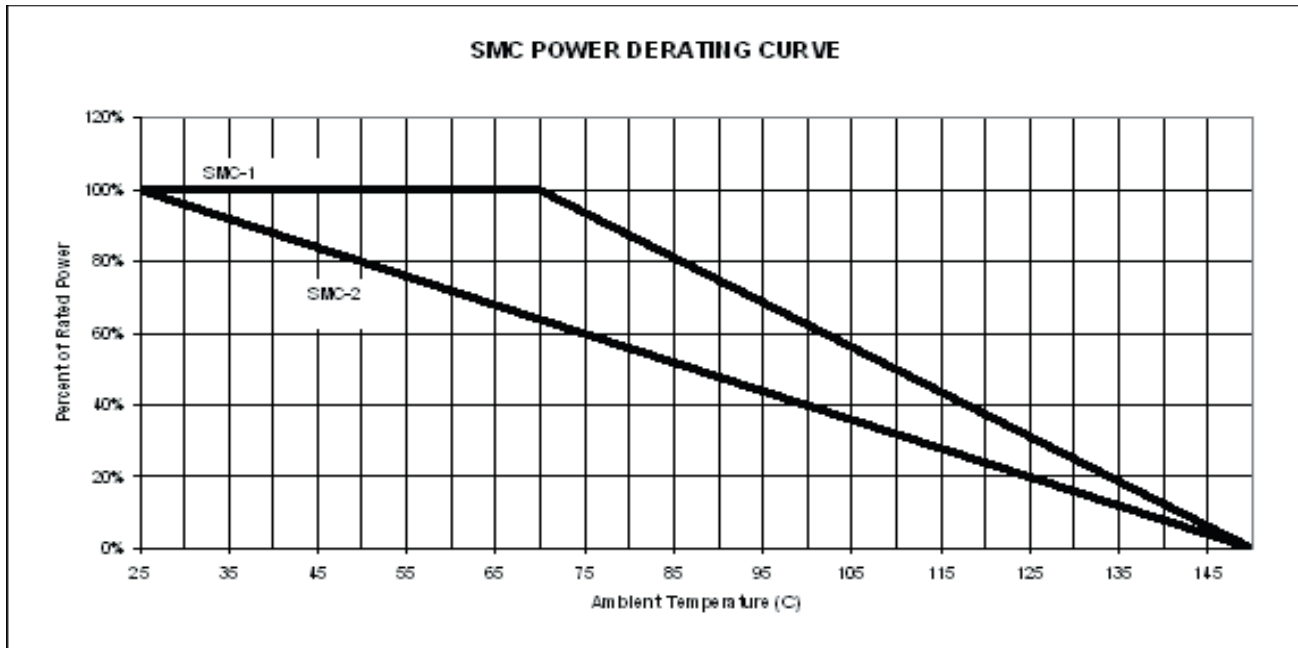


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Product Dimensions

INDUSTRY FOOTPRINT	IRC TYPE			
		L (Product Length)	W (Product Width = Diameter)	C (Termination Width)
2512	SMC-1	0.250 ± 0.010 (6.35 $\pm$ 0.25)	0.122 ± 0.003 (3.10 $\pm$ 0.08)	0.080 ± 0.010 (2.04 $\pm$ 0.25)
3610	SMC-2	0.367 ± 0.010 (9.32 $\pm$ 0.25)	0.122 ± 0.003 (3.10 $\pm$ 0.08)	0.080 ± 0.010 (2.04 $\pm$ 0.25)

SMC Temperature vs Power Derating



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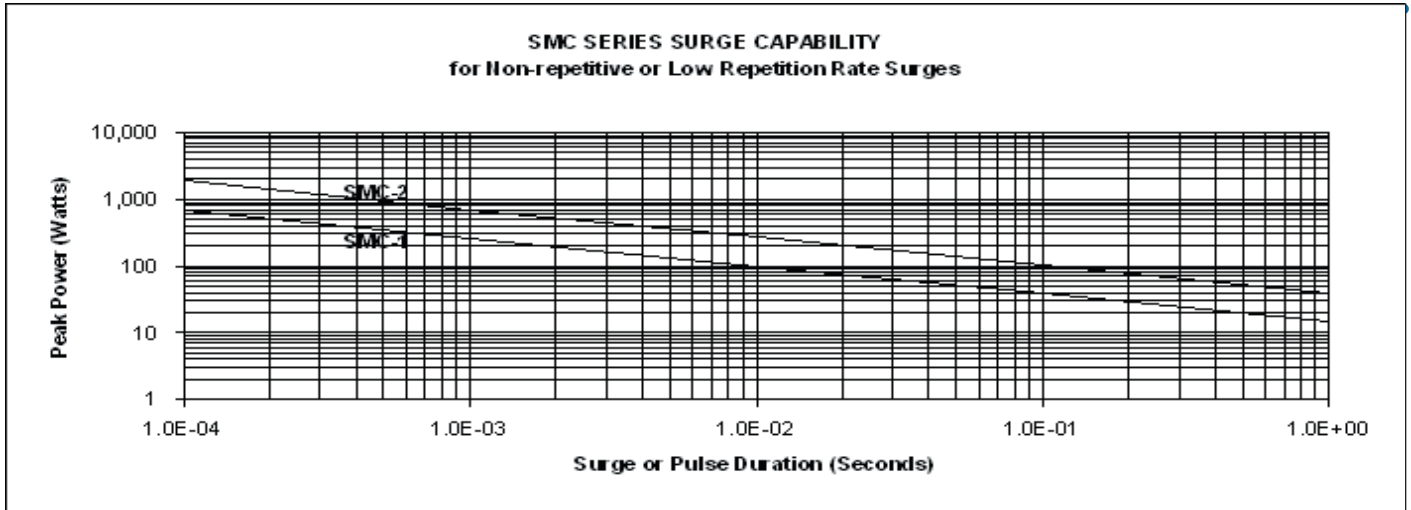
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SMC Surge Capability Data



Ordering Data

HOW TO ORDER:

Sample Part No.:

SMC1 100 2003 FLF 13

IRC Type

(SMC1 or SMC2)

TEMPERATURE COEFFICIENT

(50 or 100 PPM)

RESISTANCE VALUE

(First 3 significant figures plus fourth digit multiplier)

Example: 2203 = 220 K Ohm

51R0 = 51 Ohm

R200 = 0.2 Ohm

TOLERANCE, LEAD FREE DESIGNATION

(C= $\pm 0.25\%$, D= $\pm 0.5\%$, F= $\pm 1.0\%$, G= 2.0% , J= $\pm 5.0\%$)

LF provides clear "Lead Free" Designation

PACKAGING CODE

(7 = 7" Reel, 13 = 13" Reel)

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