



THIN FILM CHIP COMPONENTS

Vishay Electro-Films



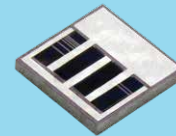
Top Contact Resistor
(SFM Series)



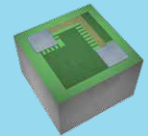
Center Tapped Resistor
(CTR Series)

Substrate materials: silicon, alumina, quartz, BeO, AlN
Resistor films: tantalum nitride, nickel chromium
Contact metallizations: wirebondable gold, wirebondable aluminum, solderable gold, solder dipped

Case sizes range from 015015 to 0808
Resistance values range from 1 M Ω to 20 M Ω
TCR as low as ± 25 ppm/ $^{\circ}$ C
Tolerance as low as ± 0.1 %



High Power Back Contact Resistor
(IGBR Series)



Mini Top Contact Resistor
(MSFM Series)



Single Value Chip Capacitor
(NC Series)



Binary MOS Capacitor
(CB Series)

Capacitance values range from 0.25 pF to 1000 pF
Tolerance as low as 0.5 pF
MOS and MNOS dielectric options
Inductance values range from 3.9 nH to 30 nH in increments

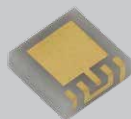
Vishay EFI specializes in **high frequency** products
 Measured frequency up to **20 GHz**
 High frequency products available in **resistors, capacitors, and spiral inductors**



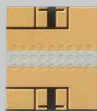
Microwave Resistor
(MIC Series)



RF Spiral Inductor
(RFLW Series)



Sidewall Patterning
(SDWP Series)



80/20 AuSn with Au-Filled Vias

Vishay EFI also offers **custom-designed submount options**
Assembly options: wirebondable, solderable, epoxy-attach
Capabilities: side-wall patterning, AuSn, Au-filled vias, edge wraps, air-bridges, and laser-machined custom substrates

For more information and questions please contact efi@vishay.com
 Vishay EFI Products: www.vishay.com/company/brands/electro-films/

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