Electro-Pyrotechnic Initiator Chip Resistor Offers Joule Effect Ignition



Vishay Intertechnology, Inc. their electropyrotechnic initiator chip resistor (EPIC), said to be the industry's first such device to offer Joule effect ignition for very fast firing times down to 50 µs, and a no fire/all fire ratio up to 70 percent. EPIC resistors, also known as bridge resistors, are resistive elements that convert electrical energy into heat energy in a precise electro-thermal profile for the purpose of initiating a series of pyrotechnic events in a controlled energetic reaction. The resistor is optimized for squib header applications in automotive safety systems for the deployment of airbags and other safety devices; military pilot ejection systems, explosive bolt disengagement of airborne missiles, chaff dispensers, artillery projectile activators, and anti-tank mines; and in mining and demolition systems. With firing energy down to 50 µJ and an ohmic range of 2R to 10R, the device provides designers with very predictable, reproducible, and reliable behavior. Offered in the standard 0603 case size, with other sizes available upon request, the resistor features easy set up of firing levels, and is compatible with various pyrotechnic compositions, even those requiring no primer. Pricing for ranges from \$0.20/piece to \$0.50/piece, depending on the quantity ordered and application.

Vishay Intertechnology, Inc. 402-563-6866, www.vishay.com [1]

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