# **SPRING-LOADED CONNECTORS**

# SERIES 945 • OMNIBALL<sup>™</sup> CIRCULAR SPRING-LOADED CONNECTOR • SURFACE MOUNT



- These connectors utilize the unique Omniball<sup>™</sup> spring loaded contact (patent pending), a rolling ball interface which enables mating surfaces to slide into contact with each other in blind mate or "twist & lock" applications. The Omniball<sup>™</sup> contact pins are designed to compress and roll, supporting lateral and rotational connections, in either static or dynamic applications, while providing optimal electrical, mechanical and structural reliability
- Precision machined, gold-plated components assure durability of 100,000 1,000,000 compression and rolling cycles
- Pistons have a .015" mid. stroke and a .030" max. stroke
- Low resistance, high current contacts are rated at 3.5 amps continuous, 5 amps peak
- Machined Fr-4 Epoxy insulators are suitable for surface mount soldering processes
- 945 Series surface mount connectors are offered in bulk packaging for manual placment and on tape & reel for automatic pick & place assembly. The recommended pad size is .128"Ø minimum

# **ORDERING INFORMATION**

Series 945 (Tube Packaged)

945-22-204-30-360101

## Series 945 (Tape & Reel Packaged)

945-22-204-30-360191

## **Technical Specifications for 945 Series**

#### Materials:

Contact ball & base: Machined copper alloy plated  $20\mu^{\prime\prime}$  gold over  $100\mu^{\prime\prime}$  nickel

Spring: Beryllium copper-plated 10µ" gold

Insulator: Machined Fr-4 Epoxy, rated UL94 V-0

### Mechanical:

Spring force @ initial height: 30 grams Spring force @ mid stroke (.015"): 55 grams Durability: 100,000 to 1,000,000 cycles

### **Electrical:**

Voltage rating: 100Vrms/150Vdc Current rating: 3.5A (continous), 5A (peak) per contact Contact resistance:  $20m\Omega$  max. Insulation resistance:  $10,000M\Omega$  min. Dielectric strength: 700Vrms min. Capacitance: 1pF max.

RoHS-2

2011/65/EU







