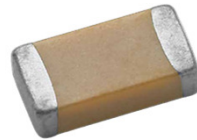




## MIL-PRF-55681 Series

### SURFACE MOUNT MLCCs FOR MILITARY APPLICATIONS



#### FEATURES

- Federal stock control no. CAGE CODE SHV71
- Qualified to MIL-PRF-55681 specifications
- Stable BX, BP & BR dielectrics
- Reliable Noble Metal Electrodes (NME)
- Available with Tin/Lead termination
- Wet build process
- Manufactured with a combination of design, materials, and tight process control for very high field reliability

#### CDR BX & BP Product Offering:

- 0805 / CDR01 & CDR31
- 1206 / CDR32
- 1210 / CDR33
- 1805 / CDR02
- 1808 / CDR03
- 1812 / CDR04 & CDR34
- 1825 / CDR35

#### DSCC BX, BR & BP Product Offering:

- 0402 / DSCC 03029
- 0603 / DSCC 03028
- 0805 / DSCC 05006
- 1206 / DSCC 05007

CDR,  
DSCC

<http://www.vishay.com/docs/45026/cdrmilprf55681.pdf>



## MIL-PRF-123 Series

### SURFACE MOUNT MLCCs FOR SPACE APPLICATIONS



#### FEATURES

- Federal stock control no. CAGE CODE SHV71
- Qualified to MIL-PRF-123 specifications
- Stable BX, BP & BR dielectrics
- Reliable Noble Metal Electrodes (NME)
- Available with Palladium Silver & Tin/Lead terminations
- Manufactured with same design, materials, and tight process controls as MIL-PRF-55681 products
- Wet build process
- 100% inspection with latest technology equipment for CSAM (scanning acoustical inspection), Hot IR and AOI (automated optical inspection of the finished capacitor)

#### Case Size / Mil 123 Style Offering:

- 0805 / Style CKS51
- 1206 / Style CKS55
- 1210 / Style CKS52
- 1808 / Style CKS53
- 1812 / Style CKS56
- 1825 / Style CKS57
- 2225 / Style CKS54

#### Product Release Dates

##### BX & BR ceramic

0805 -1206 -1210 -1808: Aug. 2014

1812 -1825 - 2225: Feb. 2015

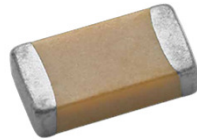
##### BP ceramic:

All case sizes: Feb. 2015



## Hi-Rel Series

### SURFACE MOUNT MLCCs FOR MILITARY APPLICATIONS



#### FEATURES

- Product is qualified to MIL-PRF-55681 requirements
- Stable COG (NPO) and X7R/X5R dielectrics
- Reliable Noble Metal Electrodes (NME)
- Available with Tin/Lead termination
- Wet build process
- Maintenance testing performed to verify consistent quality
- Various variety of quality screening and inspection options to meet customers' requirements
  - Controlled by a two digit process code at the end of the part number
    - Example: VJ0603Y104JXXAT**2L**

	Process Code	2L	2M	5G	68
MIL-PRF-55681 SCREENING		X	X		
100% voltage conditioning		X	X	X	X
Group A		X	X		X
Group C		X	X		
Group C results before shipping			X		
Life Test		X	X		
Certificate of Inspection		X	X		X
Certificate of Compliance		X	X	X	X



## Up-Screened\* Series

### SURFACE MOUNT MLCCs FOR MIL & SPACE APPLICATIONS



#### FEATURES

- Supporting demand by Mil and Aerospace device manufacturers for MLCCs not available in DLA specifications
  - Body sizes as large as 2225
  - Working Voltages as high as 500V
  - Capacitance values as high as 6.8  $\mu$ F
- Product is up-screened to the requirements of Mil 55681 or Mil 123 as defined by the customer.
  - Examples of screening available
    - Acoustic scanning (CSAM)
    - Hot IR screening
    - Automated Optical Inspection (AOI)
    - Burn in
    - Specialty certificates
- Stable X7R and COG (NPO)
- Wet build process & reliable Noble Metal Electrodes (NME)
- Available with 100% tin, pd/silver and tin/lead terminations
- Manufactured with same design, materials and tight process controls as MIL-PRF-55681 & MIL-PRF-123 products
- Manufacturing flow, screening processes and outgoing inspection requirements are controlled by a two digit process code at the end of the part number

**\*Tested to Mil or Space quality requirements but not having established reliability**