

## ES Series (For ESD Protection) of Surface Mount Multilayer

### Features:

- Fast Response < 0.5 ns
- Low Working Voltage 5 V
- Low Capacitance
- Low Leakage Current < 1  $\mu$ A
- Low Clamping Voltage

### Applications:

- Cell Phones
- Digital Cameras
- PDAs
- MP3
- Notebooks

| Part Number        | Working Voltage (Max) | Clamping Voltage (Max) | Leakage Current (Max) | Typical Capacitance Value (1 MHz) | Tolerance of Cap. |
|--------------------|-----------------------|------------------------|-----------------------|-----------------------------------|-------------------|
|                    | DC(V)                 | (V)                    | ILDC( $\mu$ A)        | C (pF)                            | (%)               |
| MLV0201ES005V0033N | 5.5                   | 45                     | 0.1                   | 33                                | $\pm$ 30          |
| MLV0201ES012V0012N | 12                    | 55                     | 0.1                   | 12                                | $\pm$ 30          |
| MLV0402ES005V0100N | 5.5                   | 55                     | 1                     | 100                               | $\pm$ 30          |
| MLV0402ES005V0056N | 5.5                   | 55                     | 1                     | 56                                | $\pm$ 30          |
| MLV0402ES005V0033N | 5.5                   | 55                     | 1                     | 33                                | $\pm$ 30          |
| MLV0402ES005V0022N | 5.5                   | 55                     | 1                     | 22                                | $\pm$ 30          |
| MLV0402ES005V0010N | 5.5                   | 60                     | 1                     | 10                                | $\pm$ 30          |
| MLV0402ES005V0005P | 5.5                   | 76                     | 1                     | 5                                 | 5~ 9 pF           |
| MLV0402ES012V0100N | 12                    | 55                     | 1                     | 100                               | $\pm$ 30          |
| MLV0402ES012V0056N | 12                    | 55                     | 1                     | 56                                | $\pm$ 30          |
| MLV0402ES012V0033N | 12                    | 55                     | 1                     | 33                                | $\pm$ 30          |
| MLV0402ES012V0022N | 12                    | 55                     | 1                     | 22                                | $\pm$ 30          |
| MLV0402ES012V0010N | 12                    | 60                     | 1                     | 10                                | $\pm$ 30          |
| MLV0402ES012V0005P | 12                    | 80                     | 1                     | 5                                 | 5~9 pF            |
| MLV0402ES024V0003N | 24                    | 120                    | 1                     | 3                                 | $\pm$ 30          |
| MLV0402ES024V02R5P | 24                    | 198                    | 1                     | 2.5                               | 2~4 pF            |
| MLV0402ES024V00R8P | 24                    | 200                    | 1                     | 0.8                               | 0.8~1.5 pF        |
| MLV0603ES005V0100N | 5.5                   | 55                     | 1                     | 100                               | $\pm$ 30          |
| MLV0603ES005V0056N | 5.5                   | 55                     | 1                     | 56                                | $\pm$ 30          |
| MLV0603ES005V0033N | 5.5                   | 55                     | 1                     | 33                                | $\pm$ 30          |
| MLV0603ES005V0022N | 5.5                   | 55                     | 1                     | 22                                | $\pm$ 30          |
| MLV0603ES005V0010N | 5.5                   | 60                     | 1                     | 10                                | $\pm$ 30          |
| MLV0603ES005V0005P | 5.5                   | 76                     | 1                     | 5                                 | 5~9 pF            |
| MLV0603ES012V0100N | 12                    | 55                     | 1                     | 100                               | $\pm$ 30          |
| MLV0603ES012V0056N | 12                    | 55                     | 1                     | 56                                | $\pm$ 30          |
| MLV0603ES012V0033N | 12                    | 55                     | 1                     | 33                                | $\pm$ 30          |
| MLV0603ES012V0022N | 12                    | 55                     | 1                     | 22                                | $\pm$ 30          |
| MLV0603ES012V0010N | 12                    | 60                     | 1                     | 10                                | $\pm$ 30          |
| MLV0603ES012V0005P | 12                    | 80                     | 1                     | 5                                 | 5~9 pF            |
| MLV0603ES024V0003N | 24                    | 120                    | 1                     | 3                                 | $\pm$ 30          |
| MLV0603ES024V02R5P | 24                    | 198                    | 1                     | 2.5                               | 2~4pF             |
| MLV0603ES024V00R8P | 24                    | 200                    | 1                     | 0.8                               | 0.8~1.5 pF        |
| MLV0805ES005V0100N | 5.5                   | 50                     | 1                     | 100                               | $\pm$ 30          |
| MLV0805ES005V0056N | 5.5                   | 50                     | 1                     | 56                                | $\pm$ 30          |