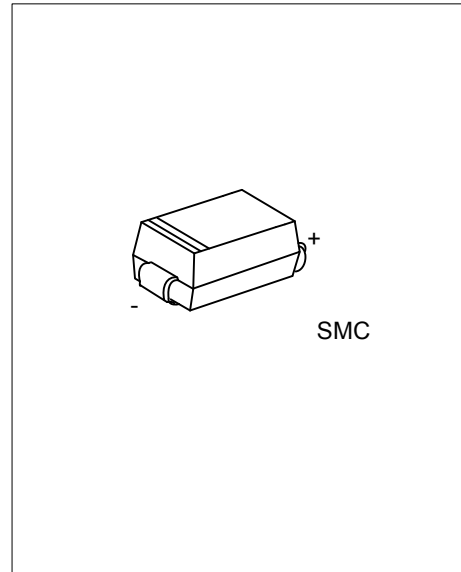




B540C

DIODE

5A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



DESCRIPTION

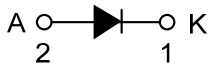
The UTC **B540C** is a schottky barrier rectifier; It provides the customers high efficiency and low power loss.

The UTC **B540C** is suitable for automatic assembly high frequency inverters and low voltage application, etc.

FEATURES

- * High efficiency
- * Low power loss

SYMBOL



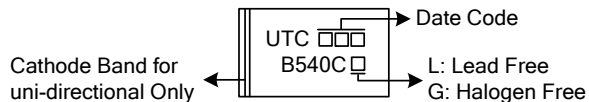
ORDERING INFORMATION

| Ordering Number | | Package | Pin Assignment | | Packing |
|-----------------|--------------|---------|----------------|---|-----------|
| Lead Free | Halogen Free | | 1 | 2 | |
| B540CL-SMC-R | B540CG-SMC-R | SMC | K | A | Tape Reel |

Note: Pin Assignment: A: Anode K: Cathode

| | |
|--|--|
| <p>B540CL-SMC-R</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p> | <p>(1) R: Tape Reel (2) SMC: SMC (3) L: Lead Free, G: Halogen Free and Lead Free</p> |
|--|--|

MARKING



■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$, unless otherwise specified)

| PARAMETER | SYMBOL | RATINGS | UNIT |
|--|-----------|----------|--------------------|
| Maximum Peak Repetitive Reverse Voltage | V_{RRM} | 40 | V |
| Maximum RMS Voltage | V_{RMS} | 28 | V |
| Maximum DC Blocking Voltage | V_{DC} | 40 | V |
| Average Rectified Output Current ($T_T=90^{\circ}\text{C}$) | I_O | 5 | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed On Rated Load (JEDEC Method) | I_{FSM} | 175 | A |
| Operating Temperature | T_J | -55~+125 | $^{\circ}\text{C}$ |
| Storage Temperature | T_{STG} | -55~+150 | $^{\circ}\text{C}$ |

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ THERMAL DATA

| PARAMETER | SYMBOL | RATINGS | UNIT |
|---------------------|---------------|---------|-----------------------------|
| Junction to Ambient | θ_{JA} | 50 | $^{\circ}\text{C}/\text{W}$ |

Note: 8.0mm^2 (0.13mm thick) land pads.

■ ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$, unless otherwise specified)

| PARAMETER | SYMBOL | RATINGS | UNIT |
|--|--------|---------------------------|------|
| Forward Voltage $I_F=5\text{A}$ (Note 1) | V_F | 0.55 | V |
| DC Reverse Current at Rated DC Blocking Voltage (Note 1) | I_R | $T_A=25^{\circ}\text{C}$ | 0.5 |
| | | $T_A=100^{\circ}\text{C}$ | 20 |
| Typical Total Capacitance (Note 2) | C_T | 300 | pF |

Notes: 1. Pulse Test Pulse Width $300\mu\text{s}$, Duty Cycle 2%.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V.

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