



Micro Commercial Components



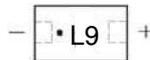
Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

BAT54LP

200mWatt, 30Volt Schottky Barrier Diode

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Ultra-Small Surface Mount Package
- Low Forward Voltage Drop
- Extremely Fast Switching Speed
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking: L9
- Halogen free available upon request by adding suffix "-HF"



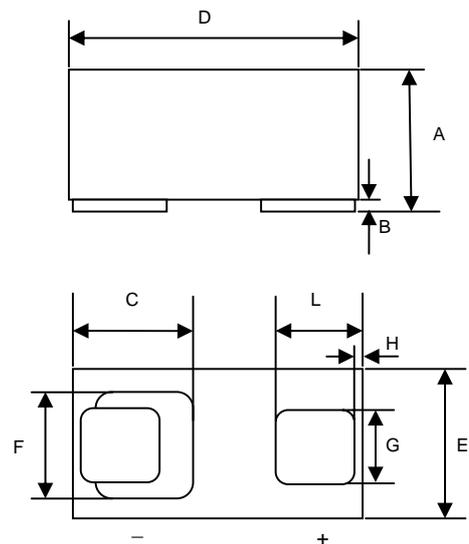
Maximum Ratings

| | | |
|--|-----------------|--------------------------------|
| Non-Repetitive Peak Reverse Voltage | V_{RM} | 30V |
| DC Blocking Voltage | V_R | 21V |
| Average Rectified Output Current | I_O | 100mA |
| Forward continuous Current | I_F | 200mA |
| Repetitive Peak Forward Current | I_{FRM} | 300mA |
| Forward Surge Current | I_{FSM} | 600mA |
| Total Power Dissipation @ $T_A = 25^\circ C$ | P_D | 200mW |
| Storage Temperature Range | T_{stg} | $-65^\circ C$ to $150^\circ C$ |
| Junction Temperature | T_j | $125^\circ C$ |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | $625^\circ C/W$ |

Electrical Characteristics @ 25°C Unless Otherwise Specified

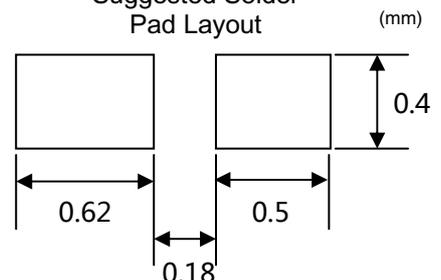
| Ratings | Symbol | Max. | Notes |
|---------------------------|------------|--|---|
| Forward Voltage | V_F | 240mV 320mV 400mV 500mV 1000mV | $I_F = 0.1mA$ $I_F = 1.0mA$ $I_F = 10mA$ $I_F = 30mA$ $I_F = 100mA$ |
| Reverse Current | I_R | 2 μA | $V_R = 25V$ |
| Reverse Breakdown Voltage | $V_{(BR)}$ | >30V | $I_R = 100\mu A$ |
| Total Capacitance | C_T | 10pF | Measured at 1.0MHz, $V_R = 1.0V$ |
| Reverse Recovery Time | t_{rr} | 5ns | $I_F = 10mA$; $I_R = 10mA \sim 1.0mA$, $R_L = 100 \Omega$ |

SOD-882



| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|-------|------------|------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | 0.018 | 0.022 | 0.45 | 0.55 | |
| B | 0.000 | 0.003 | 0.01 | 0.07 | |
| C | 0.019 REF. | | 0.470 REF. | | |
| D | 0.037 | 0.041 | 0.95 | 1.05 | |
| E | 0.022 | 0.026 | 0.55 | 0.65 | |
| F | 0.017 REF. | | 0.420 REF. | | |
| G | 0.011 | 0.015 | 0.27 | 0.37 | |
| H | 0.001 REF. | | 0.030 REF. | | |
| L | 0.013 | 0.017 | 0.34 | 0.44 | |

Suggested Solder Pad Layout





TM

Micro Commercial Components

Ordering Information

| Device | Packing |
|------------------|-----------------------|
| (Part Number)-TP | Tape&Reel;10Kpcs/Reel |

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

www.mccsemi.com