



Micro Commercial Components



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

B5819XP

1.0 A Schottky Rectifier 40 Volts

Features

- Low forward voltage drop
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"
- Marking: AD

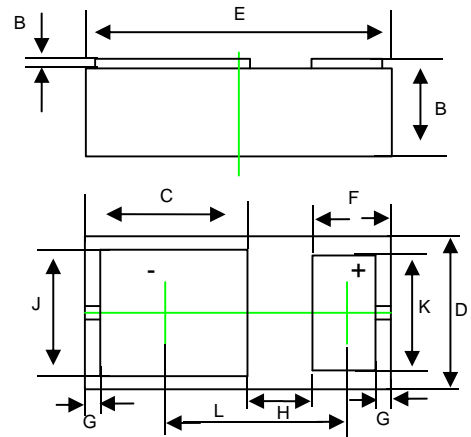


Maximum Ratings

| Symbol | Rating | Rating | Unit |
|--------------|---|-------------|---------------|
| V_{RWM} | Working Peak Reverse Voltage | 40 | V |
| $V_{R(RMS)}$ | RMS Reverse Voltage | 28 | V |
| I_O | Mean Rectifying Current | 1.0 | A |
| I_{FSM} | Peak Forward Surge Current @ $t < 8.3ms$ | 5.0 | A |
| P_D | Power Dissipation | 150 | mW |
| R_{thJA} | Thermal Resistance from Junction to Ambient | 667 | $^{\circ}C/W$ |
| T_J | Junction Temperature | 125 | $^{\circ}C$ |
| T_{STG} | Storage Temperature | -55 to +150 | $^{\circ}C$ |

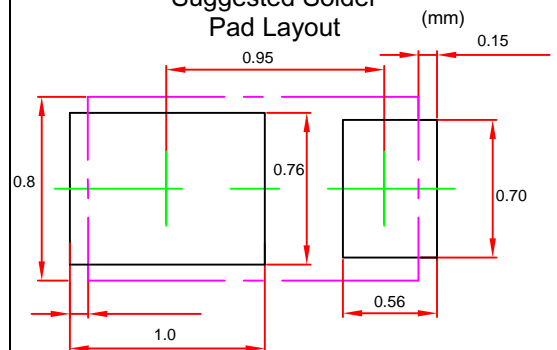
Electrical Characteristics @ 25°C Unless Otherwise Specified

| Symbol | Parameter | Min | Typ | Max | Units |
|------------|--|-----|------|-----|---------|
| $V_{(BR)}$ | Reverse Voltage ($I_R=10\mu A$) | 40 | --- | --- | Vdc |
| I_R | Reverse Current ($V_R=40Vdc$) | --- | --- | 50 | μA |
| V_F | Forward Voltage ($I_F=0.5A$) ($I_F=0.7A$) | --- | 0.47 | --- | Vdc |
| C_D | Forward Voltage ($V_R=1Vdc; f=1MHz; T_j=25^{\circ}C$) ($V_R=10Vdc; f=1MHz; T_j=25^{\circ}C$) | --- | 50 | --- | pF |
| t_{rr} | Reverse Recovery Time ($I_F=I_R=10mA; R_L=100; I_{R(meas)}=1mA$) | --- | 15 | --- | ns |

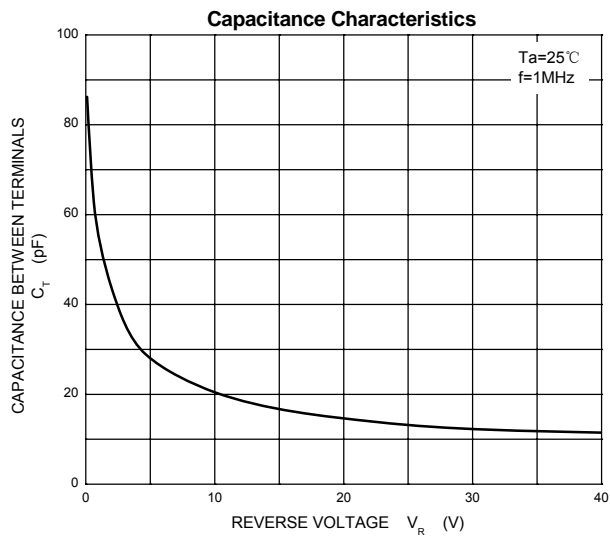
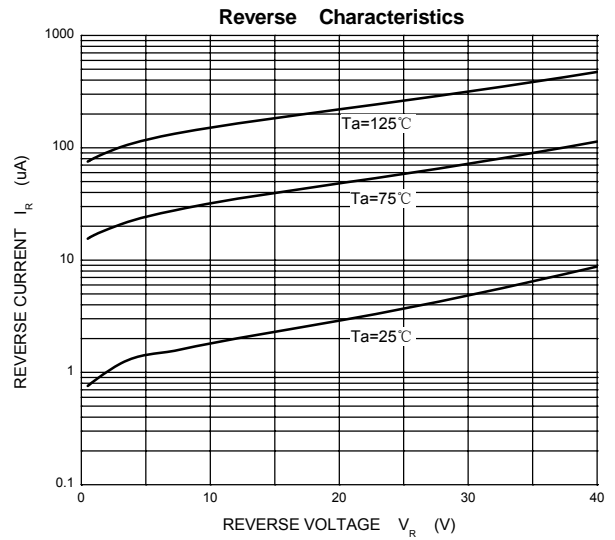
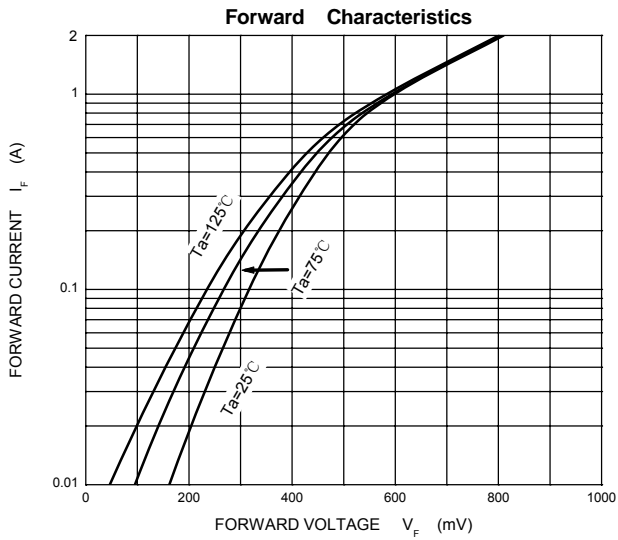


| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|-------|------------|------|------|
| | INCHES | | MM | | |
| A | 0.018 | 0.022 | 0.45 | 0.55 | |
| B | 0.000 | 0.004 | 0.01 | 0.09 | |
| C | 0.033 REF. | | 0.850 REF. | | |
| D | 0.030 | 0.033 | 0.75 | 0.85 | |
| E | 0.061 | 0.065 | 1.55 | 1.65 | |
| F | 0.016 REF. | | 0.410 REF. | | |
| G | 0.003 REF. | | 0.080 REF. | | |
| H | 0.013 REF. | | 0.340 REF. | | |
| J | 0.024 | 0.030 | 0.60 | 0.76 | |
| K | 0.020 | 0.027 | 0.52 | 0.68 | |
| L | 0.035 | 0.039 | 0.90 | 1.00 | |

Suggested Solder Pad Layout



Typical Characteristics





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Ordering Information :

| Device | Packing |
|----------------|------------------------|
| Part Number-TP | Tape&Reel: 10Kpcs/Reel |

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

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