



Micro Commercial Components



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BAT54V

150mW Schottky Diodes

Features

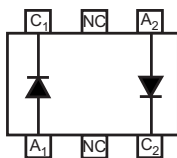
- Fast Switching Speed
- Low Forward Voltage Drop
- PN Junction Guard Ring for Transient and ESD Protection
- Lead Free Plating
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

| Symbol | Parameter | Rating | Unit |
|-----------------|--|-------------|---------------|
| V_{RRM} | Peak Repetitive Reverse Voltage | 30 | V |
| V_{RWM} | Working Peak Reverse Voltage | | |
| V_R | DC Blocking Voltage | | |
| I_O | Average Rectified Output Current | 200 | mA |
| $R_{\theta JA}$ | Thermal Resistance Junction to Ambient | 833 | $^{\circ}C/W$ |
| P_D | Power dissipation | 150 | mW |
| T_J | Junction Temperature | -65 to +150 | $^{\circ}C$ |
| T_{STG} | Storage Temperature | -65 to +150 | $^{\circ}C$ |

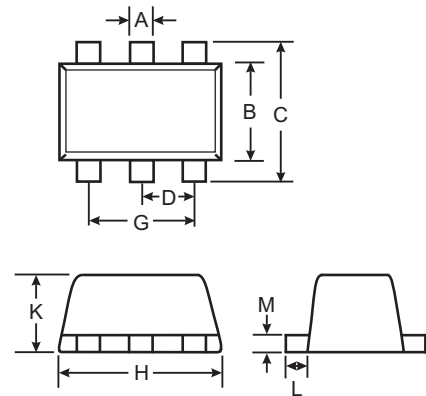
Electrical Characteristics @ 25°C Unless Otherwise Specified

| Symbol | Parameter | Min | Max | Test Conditions |
|------------|---------------------------------|-----|--|---|
| $V_{(BR)}$ | Reverse Breakdown Voltage | 30V | | $I_R=100 \mu A$ |
| I_R | Reverse Voltage Leakage Current | | 2 μA | $V_R=25V$ |
| V_F | Forward Voltage | | 240mV 320mV 400mV 500mV 1000mV | $I_F=0.1mA$ $I_F=1.0mA$ $I_F=10mA$ $I_F=30mA$ $I_F=100mA$ |
| C_T | Total Capacitance | | 10pF | $V_R=1V, f=1MHz$ |
| t_{rr} | Reverse Recovery Time | | 5ns | $I_{r1}=10mA, I_{r2}=10mA \sim 1mA, R_L=100 \Omega$ |



Marking: KAV

SOT-563



| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | .006 | .011 | 0.15 | 0.30 | |
| B | .043 | .049 | 1.10 | 1.25 | |
| C | .061 | .067 | 1.55 | 1.70 | |
| D | .020 | | 0.50 | | |
| G | .035 | .043 | 0.90 | 1.10 | |
| H | .059 | .067 | 1.50 | 1.70 | |
| K | .022 | .023 | 0.56 | 0.60 | |
| L | .004 | .011 | 0.10 | 0.30 | |
| M | .004 | .007 | 0.10 | 0.18 | |

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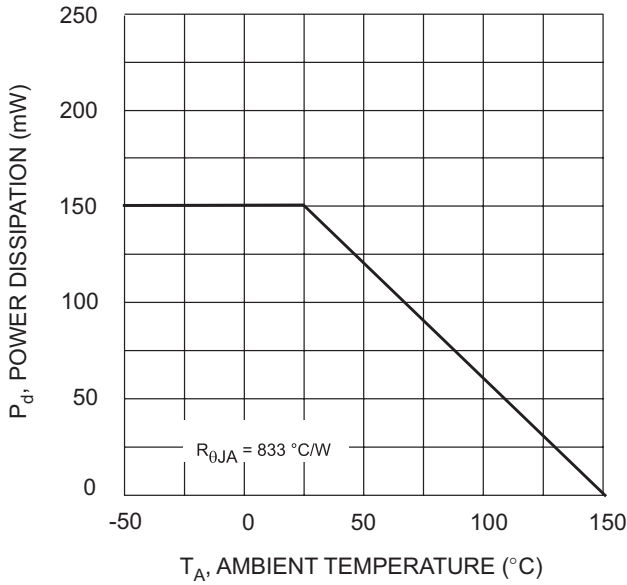


Fig. 1, Derating Curve - Total

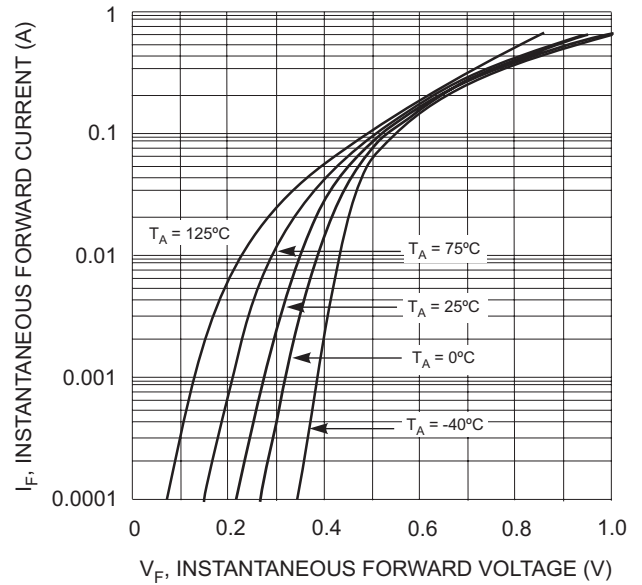


Fig. 2 Forward Characteristics

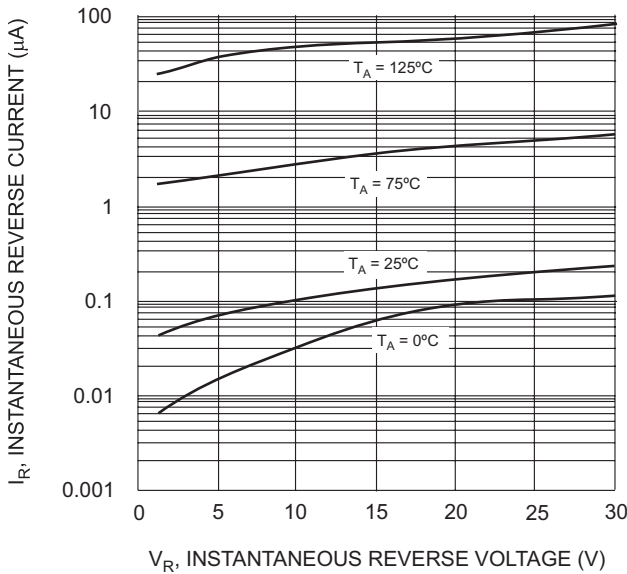


Fig. 3 Typical Reverse Characteristics

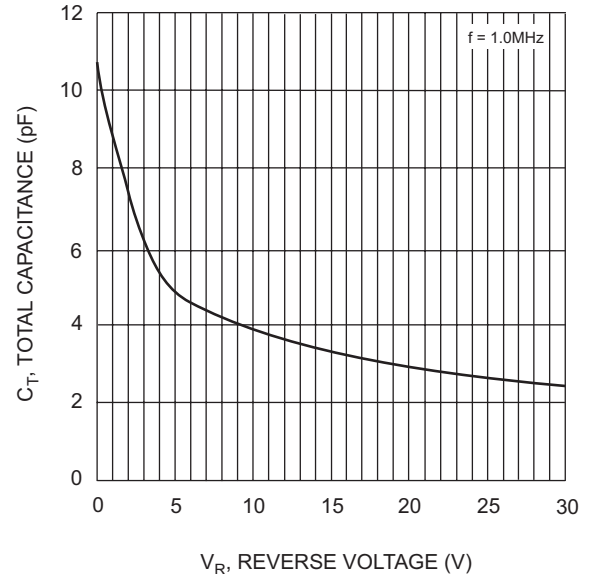


Fig. 4 Typical Capacitance vs. Reverse Voltage



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Ordering Information :

| Device | Packing |
|----------------|-----------------------|
| Part Number-TP | Tape&Reel: 3Kpcs/Reel |

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

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