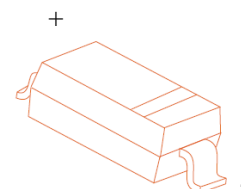




LI DE HENG ELECTRONICS

BAT42W/BAT43W

SOD-123 Plastic-Encapsulate Diodes

BAT42W/BAT43W SCHOTTKY DIODES**SOD-123****FEATURES**

- Low Forward Voltage Drop
- Fast Switching Time
- Surface Mount Package Ideally Suited for Automatic Insertion

Maximum Ratings and Electrical Characteristics, Single Diode @T_A=25°C

| Parameter Symbol | | BAT42W/BAT43W | Unit |
|---|---------------------------------|---------------|------|
| Peak Repetitive Peak reverse voltage Working Peak DC Blocking Voltage | V_{RRM} V_{RWM} V_R | 30 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 21 | V |
| Forward Continuous Current | I_{FM} | 200 | mA |
| Repetitive Peak Forward Current @t<1.0s | I_{FRM} | 500 | mA |
| Peak forward surge current @<10ms | I_{FSM} | 4.0 | A |
| Power Dissipation | P_D | 500 | mW |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 250 | °C/W |
| Storage temperature | T_{STG} | -55~+150 | °C |

Electrical Ratings @T_A=25°C

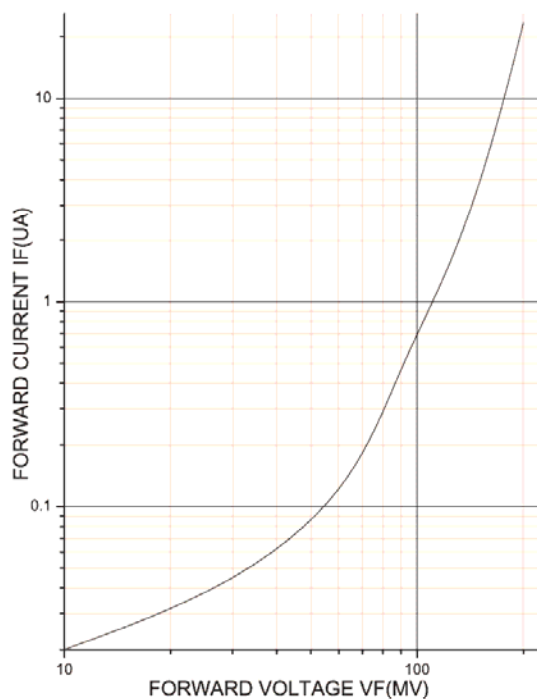
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-------------------------------|-------------|------|------|------|---------|--|
| Reverse Breakdown Voltage | $V_{(BR)R}$ | 30 | | | V | $I_R=10\mu A$ |
| Forward voltage | All Types | | | 1.0 | V | $I_F=200mA$ |
| | BAT42W | | | 0.4 | V | $I_F=10mA$ |
| | BAT42W | | | 0.65 | V | $I_F=50mA$ |
| | BAT43W | 0.26 | | 0.33 | V | $I_F=2mA$ |
| | BAT43W | | | 0.45 | V | $I_F=15mA$ |
| Reverse current | I_R | | | 0.5 | μA | $V_R=25V$ |
| Capacitance between terminals | C_T | | | 10 | pF | $V_R=1.0V, f=1.0MHz$ |
| Reverse Recovery Time | t_{rr} | | | 5 | ns | $I_F=I_R=10mA$ $I_{rr}=0.1X I_R, R_L=100\Omega$ |

LI DE HENG ELECTRONICS
Typital Characteristics

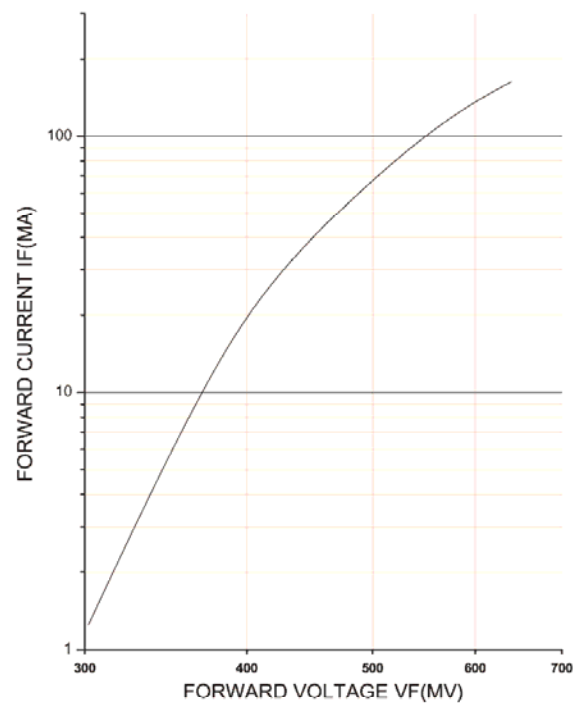
1N4148WS/BAV16WS

BAT42W

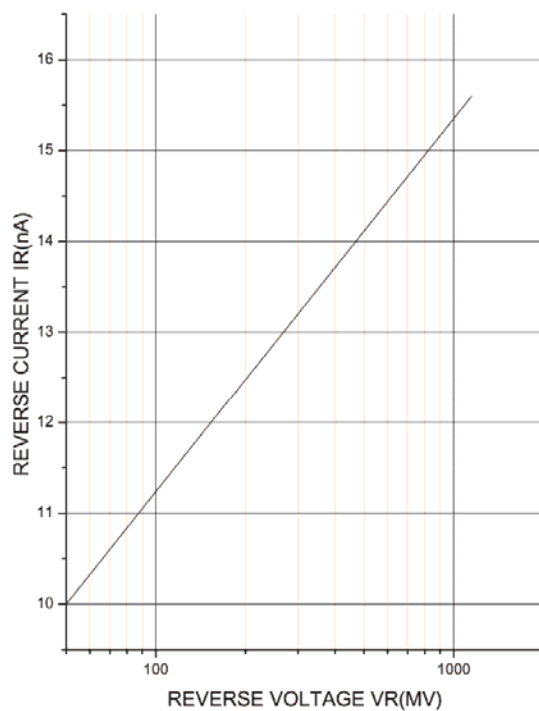
IF-VF



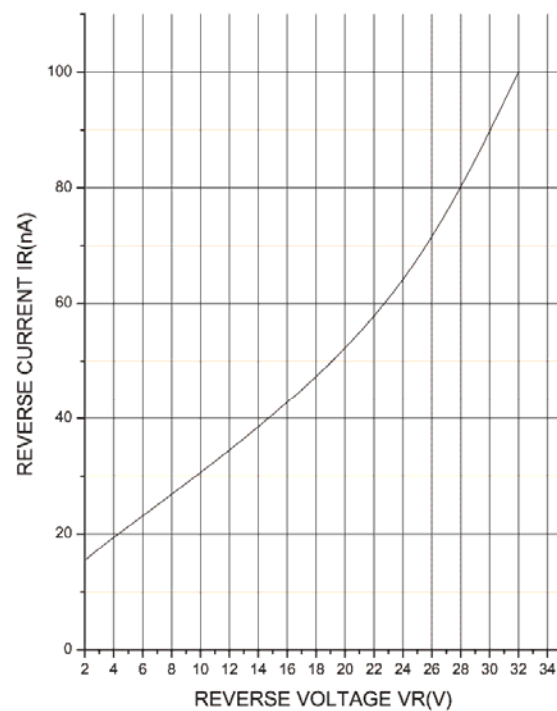
IF-VF



IR-VR



IR-VR



LI DE HENG ELECTRONICS
Typital Characteristics

1N4148WS/BAV16WS
BAT43W

