

Surface mount switching diode

MMBD4148A/CA/CC/SE

FEATURES

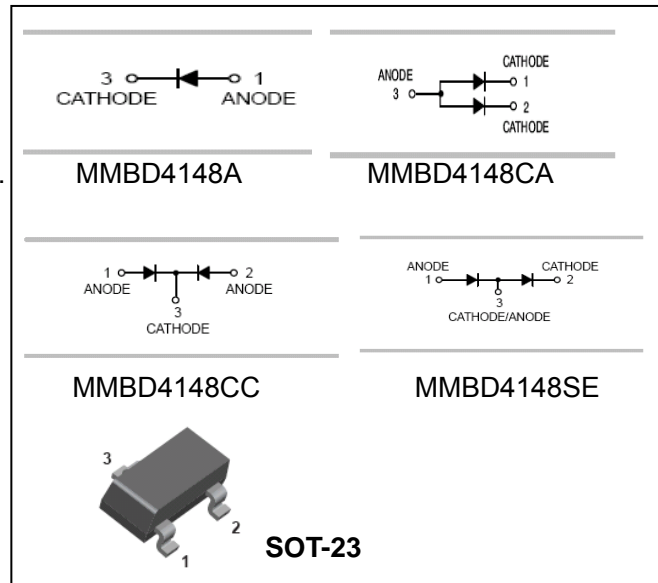
- Fast switching speed.
- High conductance.
- For general purpose switching applications.
- Surface mount package ideally suited for automatic insertion.



APPLICATIONS

- Small signal switching.

ORDERING INFORMATION



| Type No. | Marking | Package Code |
|------------|---------|--------------|
| MMBD4148A | 5H | SOT-23 |
| MMBD4148CA | D6 | SOT-23 |
| MMBD4148CC | D5 | SOT-23 |
| MMBD4148SE | D4 | SOT-23 |

MAXIMUM RATING @ Ta=25°C unless otherwise specified

| Parameter | Symbol | Limits | Unit |
|--|-----------------|-------------|------|
| DC Reverse Voltage | V_R | 100 | V |
| Forward Continuous Current(Max.) | I_{FM} | 600 | mA |
| Average rectified Current | $I_{F(AV)}$ | 200 | mA |
| Recurrent peak forward current | I_{FRM} | 700 | mA |
| Non-repetitive peak forward surge current (1.0s) (1.0m) | I_{FSM} | 1.0 2.0 | A |
| Power Dissipation | P_d | 350 | mW |
| Thermal resistance,Junction to ambient | $R_{\theta JA}$ | 357 | °C/W |
| Operating junction temperature | T_J | 150 | °C |
| Storage temperature range | T_{STG} | -55 to +150 | °C |

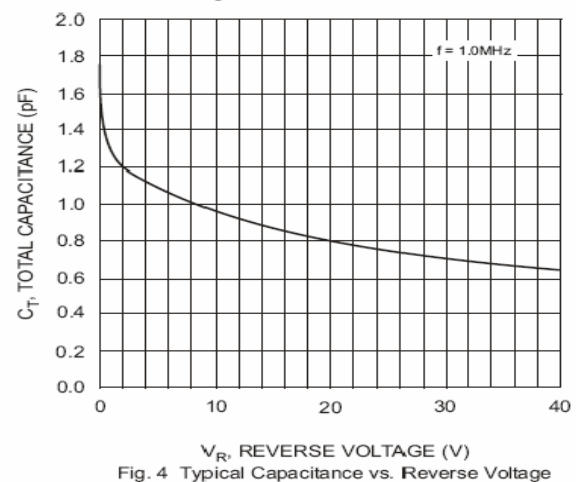
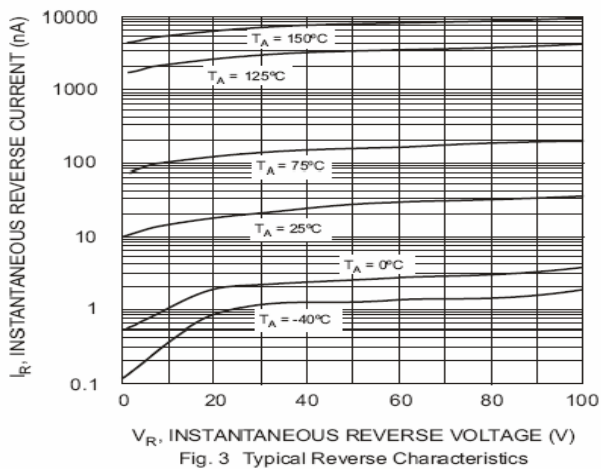
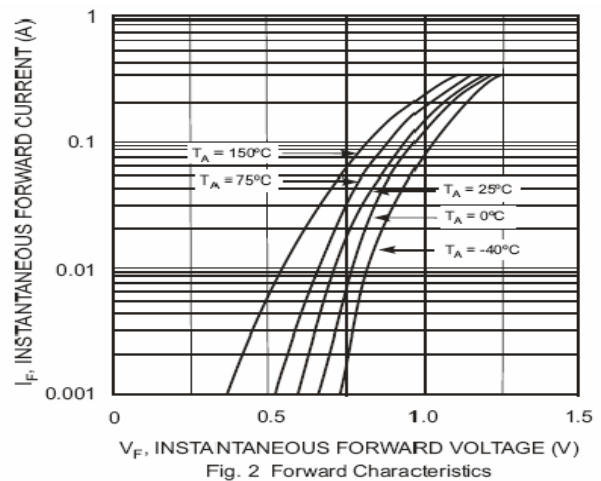
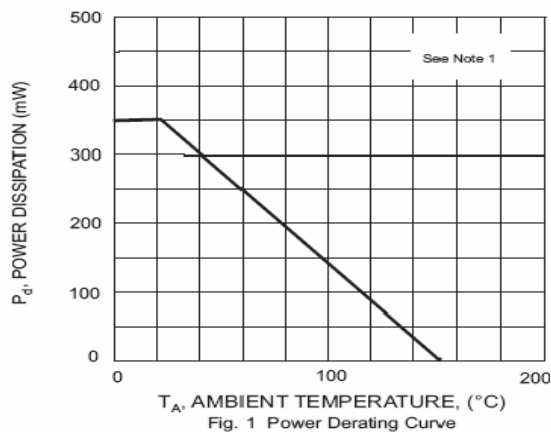
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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|---------------------------|--------------|------|------|------|---------|---|
| Reverse Breakdown Voltage | $V_{(BR)R1}$ | 100 | | | V | $I_R=100\mu A$ |
| | $V_{(BR)R2}$ | 75 | | | V | $I_R=5\mu A$ |
| Forward voltage | V_F | | | 1 | V | $I_F=10mA$ |
| Reverse current | I_{R1} | | | 25 | nA | $V_R=20V$ |
| | I_{R2} | | | 5 | μA | $V_R=75V$ |
| Total Capacitance | C_T | | | 4 | pF | $V_R=0V, f=1MHz$ |
| Reverse Recovery Time | t_{rr} | | | 4 | ns | $I_F=10mA, V_R=6V$ $I_{rr}=0.1 \cdot I_R, R_L=100\Omega$ |

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



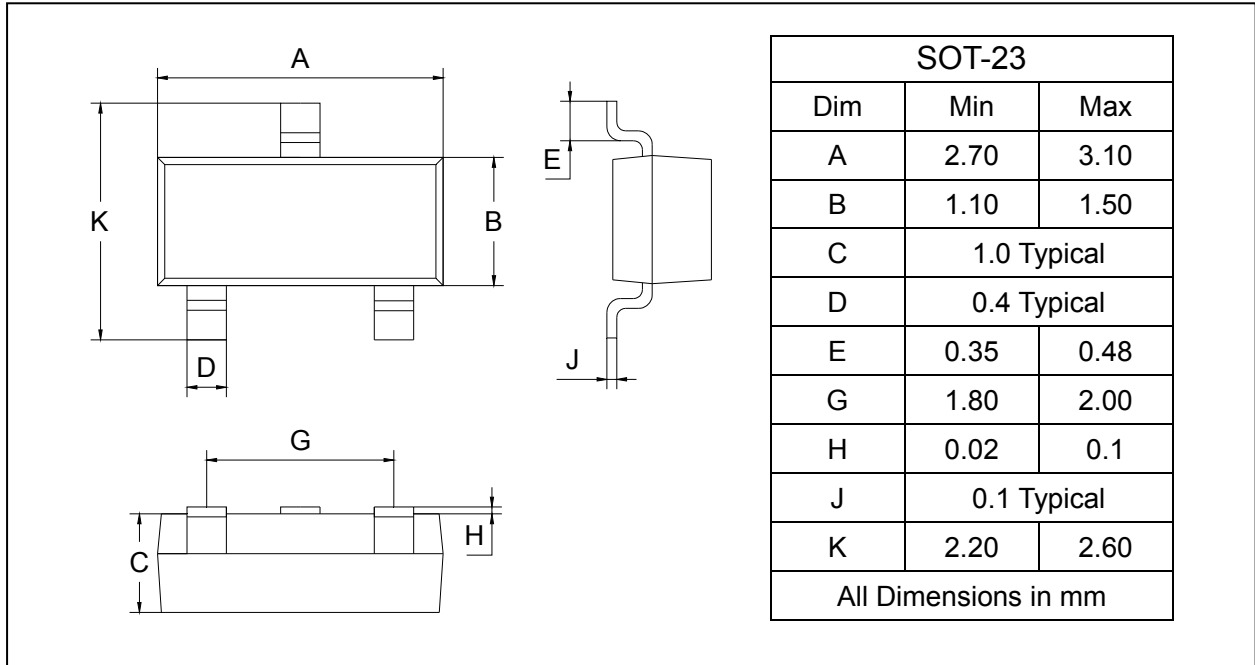
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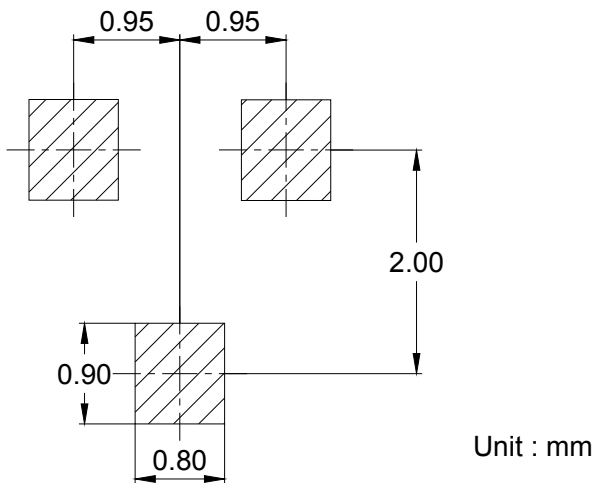
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

| Device | Package | Shipping |
|--------------------|---------|----------------|
| MMBD4148A/CA/CC/SE | SOT-23 | 3000/Tape&Reel |