

# 200mA,50V Schottky Diodes

### **Features**

- Low leakage current
- Schottky barrier diodes
- Low forward voltage drop
- For general purpose applications
- Moisture sensitivity: level 1, per J-STD-020
- For fast switching and low logic level applications
- $\bullet$  High temperature soldering guaranteed: 260  $^\circ\!\mathrm{C}/10$  seconds



#### LL-34(MINI MELF)

# **Applications**

- HF-Detector, Protection circuit
- DC/DC converter for notebooks
- Small battery charger, Power supplies

| Maximum Ratings & Electrical Characteristics(TA=25°C unless otherwise noted) |                  |             |      |
|--|------------------|-------------|------|
| Parameter  | Symbol           | BAS86       | Unit |
| Maximum repetitive peak reverse voltage                                      | Vrrm             | 50          | V    |
| Forward continuous current   | lF               | 200         | mA   |
| Repetitive peak forward current at tp<1s, $\delta$ <0.5                      | IFRM             | 500         | mA   |
| Power dissipation (infinite heatsink)  | P <sub>tot</sub> | 200         | mW   |
| Surge forward current at tp<10ms   | IFSM             | 7.5         | А    |
| Maximum junction temperature   | TJ               | 125         | °C   |
| Storage temperature range  | Тѕтс             | -65 to +150 | °C   |

| Thermal-Mechanical Specifications (TA=25°C unless otherwise noted) |        |     |       |  |
|--|--------|-----|-------|--|
| Parameter  | Symbol | Тур | Unit  |  |
| Thermal Resistance, Junction to Ambient                            | Reja   | 300 | °C /W |  |



**GOOD-ARK Electronics** 

| Electrical Specifications(TA=25°C unless otherwise noted) |                 |   |       |       |      |  |
|---|-----------------|---|-------|-------|------|--|
| Parameter   | Symbol          | Test<br>Conditions  | Тур   | Мах   | Unit |  |
| Maximum forward voltage<br>pulse test tp<300us,δ<2%       | VF              | I <sub>F</sub> =0.1mA                                       | 0.200 | 0.300 |      |  |
|   |                 | I <sub>F</sub> =1mA   | 0.275 | 0.380 |      |  |
|   |                 | I <sub>F</sub> =10mA  | 0.365 | 0.450 | V    |  |
|   |                 | l⊧=30mA   | 0.460 | 0.600 |      |  |
|   |                 | I⊧=100mA  | 0.700 | 0.900 |      |  |
| Maximum leakage current<br>pulse test tp<300us, δ<2%      | IR              | V <sub>R</sub> =25  | 0.3   | 5     | uA   |  |
| Maximum junction capacitance                              | Ctot            | 1 V<br>1 MHZ  | ٤     | 3     | pF   |  |
| Maximum reverse recovery time                             | t <sub>rr</sub> | l <sub>F</sub> =l <sub>R</sub> =10mA<br>Irr=1mA,<br>RL=100Ω | ţ     | 5     | nS   |  |

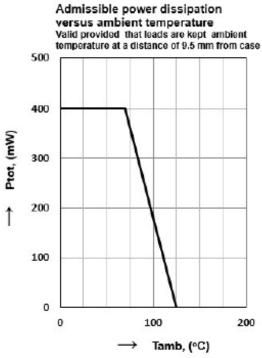
Note:

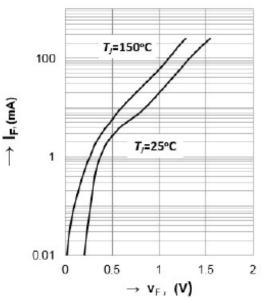
1. Valid provided that electrodes are kept at ambient temperature.



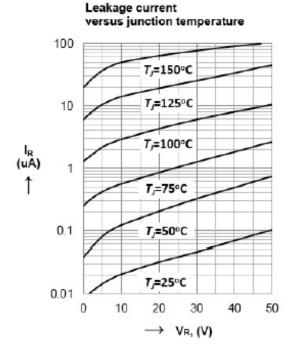
### **Ratings and Characteristics Curves**

#### (TA = 25°C unless otherwise noted)

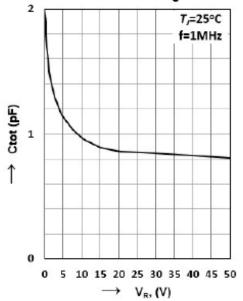




Typical forward characteristics



Typical capacitance versus reverse voltage



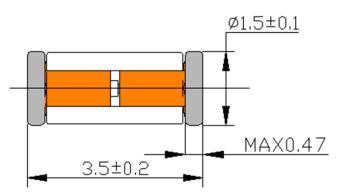


# Package Outline Dimensions

in inches (millimeters)

# LL-34 (MINI MELF)

CASE DIMENSION (LL-34 Type) Unit mm



# **Revision History**

| Document Version | Date of release | Description of changes |
|------------------|-----------------|------------------------|
| Rev.A            | 2021.06.01      | Released Datasheet     |
| Rev.B            | 2023.10.31      | Modify document format |



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