

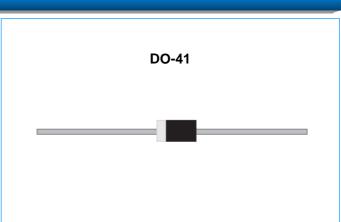


Ultra Super Fast Recovery Diodes

HER101~HER108 50 to 1000 V DO-41

Features

- **u** Low forward voltage drop.
- u High current capability.
- u High reliability.
- u High surge current capability.
- u High speed switching.



Mechanical Date

u Case: Molded plastic

u Epoxy: UL 94V-0 rate flame retardant

u Lead: Axial leads, solderable per MIL-STD-202, method

208 guaranteed

u Polarity: Color band denotes cathode end

u Mounting position: Anyu Weight: 0.34 grams

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

| Type Number | | HER101 | HER102 | HER103 | HER104 | HER105 | HER106 | HER107 | HER108 | Unit |
|---|-----------------------|----------|--------|--------|--------|--------|--------|--------|------------|------|
| Maximum Recurrent Peak Reverse Voltage | | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | | 35 | 70 | 140 | 210 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Ta=50℃ | | 1.0 | | | | | | | Α | |
| Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | | 30 | | | | | | | А | |
| Maximum Instantaneous Forward Voltage at 1.0A | | 1.0 | | | 1. | .3 | | 1.85 | | > |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | T _a =25℃ | 5.0 | | | | | | | μΑ | |
| | T _a =100°C | 150 | | | | | | | | |
| Maximum Reverse Recovery Time (Note 1) | | 50 70 | | | | | | | ns | |
| Typical Junction Capacitance (Note 2) | | 20 | | | | | | | pF | |
| Operating and Storage Temperature Range T _J , T _{STG} | | -65~+150 | | | | | | | $^{\circ}$ | |

NOTES:

- 1. Reverse Recovery Time test condition: I_F =0.5A, I_R =1.0A, I_{RR} =0.25A
- 2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.



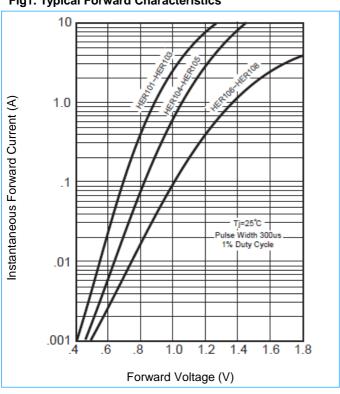


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Rating and Characteristic Curves

Fig1. Typical Forward Characteristics



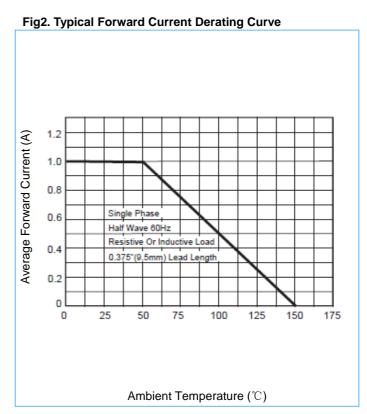


Fig3. Maximum Non-Repetitive Forward Surge Current

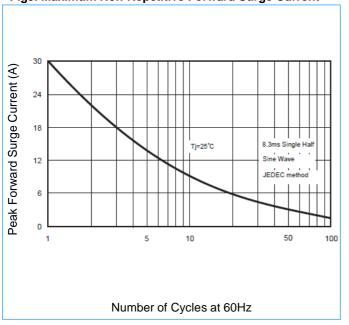
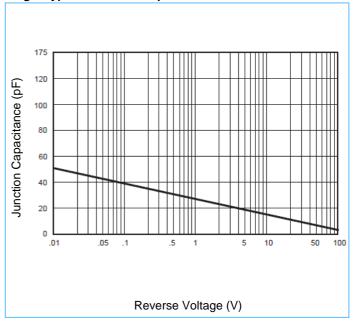


Fig4. Typical Junction Capacitance



Please refer to www.socay.com for current information.



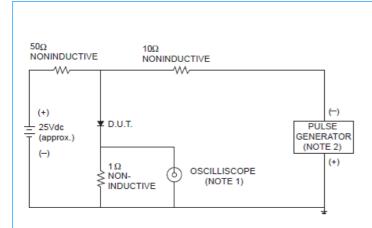


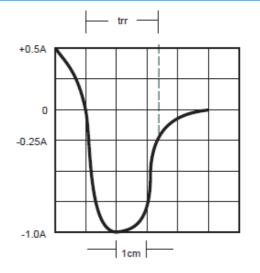
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Rating and Characteristic Curves (Continue)

Fig5. Test Circuit Diagram and Reverse Recovery Time Characteristics





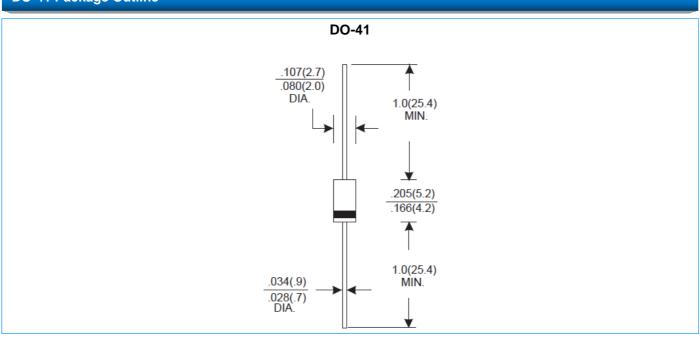
NOTES:

- 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.
- 2. Rise Time= 10ns max., Source Impedance= 50 ohms.

SET TIME BASE FOR

50 / 10ns / cm

DO-41 Package Outline



Packaging Information

| Part Number | Component Package | Quantity | | |
|---------------|-------------------|----------|--|--|
| HER101~HER108 | DO-41 | 5000 PCS | | |

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