

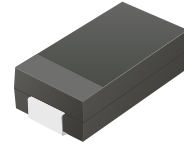
CDBA240LL-HF

Reverse Voltage: 40 Volts

Forward Current: 2 Amp

RoHS Device

Halogen free

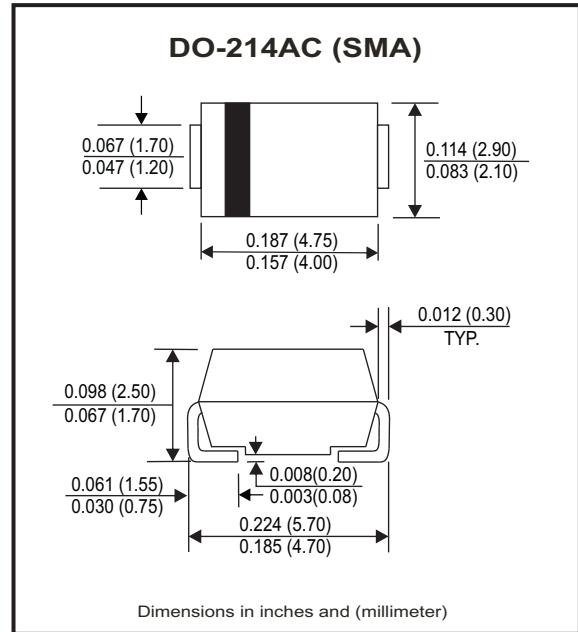


Features

- Low forward voltage drop.
- Excellent high temperature stability.
- Fast switching capability.

Mechanical data

- Epoxy: UL 94V-0 rate flame retardant.
- Case: Molded plastic, DO-214AC / SMA.
- Terminals: Solder plated, Solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any.
- Weight: 0.08 grams(approx).



Circuit diagram



Maximum Ratings (at TA=25°C unless otherwise noted)

| Parameter | Conditions | Symbol | MIN. | TYP. | MAX. | Unit |
|---------------------------------------|--|------------------|------|------|------|------|
| Peak repetitive reverse voltage | I _R =1mA, T _J =25°C | V _{RRM} | | | 40 | V |
| Working peak reverse voltage | | V _{RRM} | | | 40 | |
| DC blocking voltage | | V _{RM} | | | 40 | |
| Forward rectified current | | I _O | | | 2 | A |
| Forward surge current | 8.3ms single half sine-wave superimposed on rate load (JEDEC method) | I _{FSM} | | | 70 | |
| Peak repetitive reverse surge current | 2us - 1KHz | I _{RRM} | | | 2 | |
| Thermal resistance | Junction to case | R _{θJC} | | 40 | | °C/W |
| | Junction to ambient | R _{θJA} | | 70 | | |
| Operating temperature range | | T _J | -55 | | +100 | °C |
| Storage temperature range | | T _{STG} | -55 | | +150 | |

Electrical Characteristics (at TA=25°C unless otherwise noted)

| Parameter | Conditions | Symbol | MIN. | TYP. | MAX. | Unit |
|----------------------|--|----------------|------|------|------|------|
| Forward voltage drop | I _F = 2A, T _J = 25°C | V _F | | 310 | 350 | mV |
| Reverse current | V _R = V _{RRM} , T _J = 25°C | I _R | | 0.2 | 1 | mA |
| | V _R = V _{RRM} , T _J = 100°C | I _R | | | 80 | |

Company reserves the right to improve product design, functions and reliability without notice.

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RATING AND CHARACTERISTIC CURVES (CDBA240LL-HF)

Fig.1 - Instantaneous Forward Characteristics

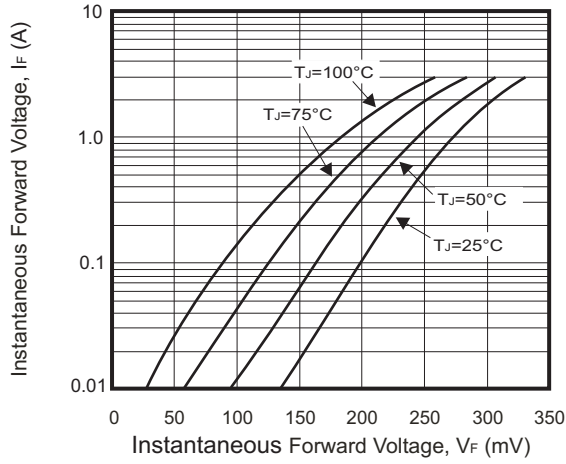


Fig.2 - Reverse Characteristics

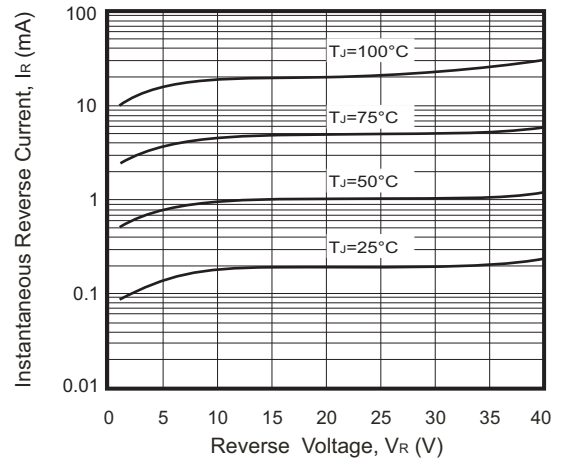


Fig.3 - Forward Power Dissipation

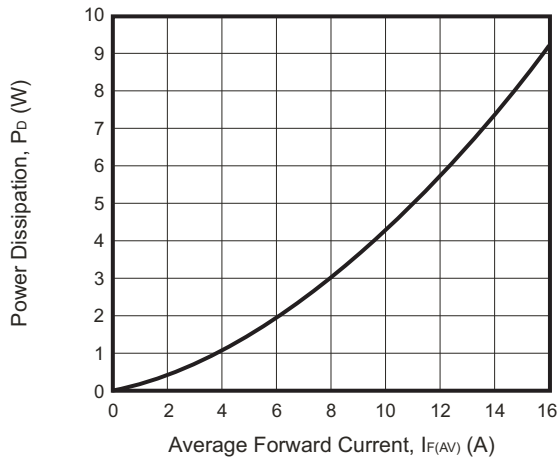


Fig.4 - Forward Current Derating Curve

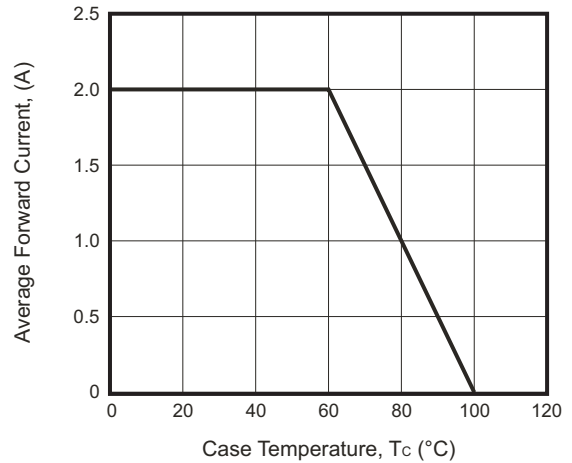
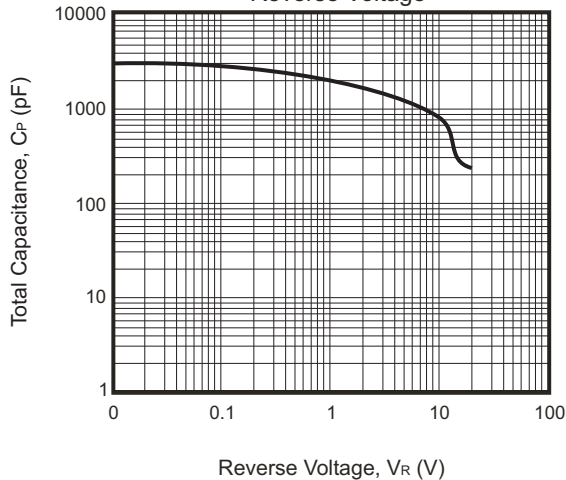
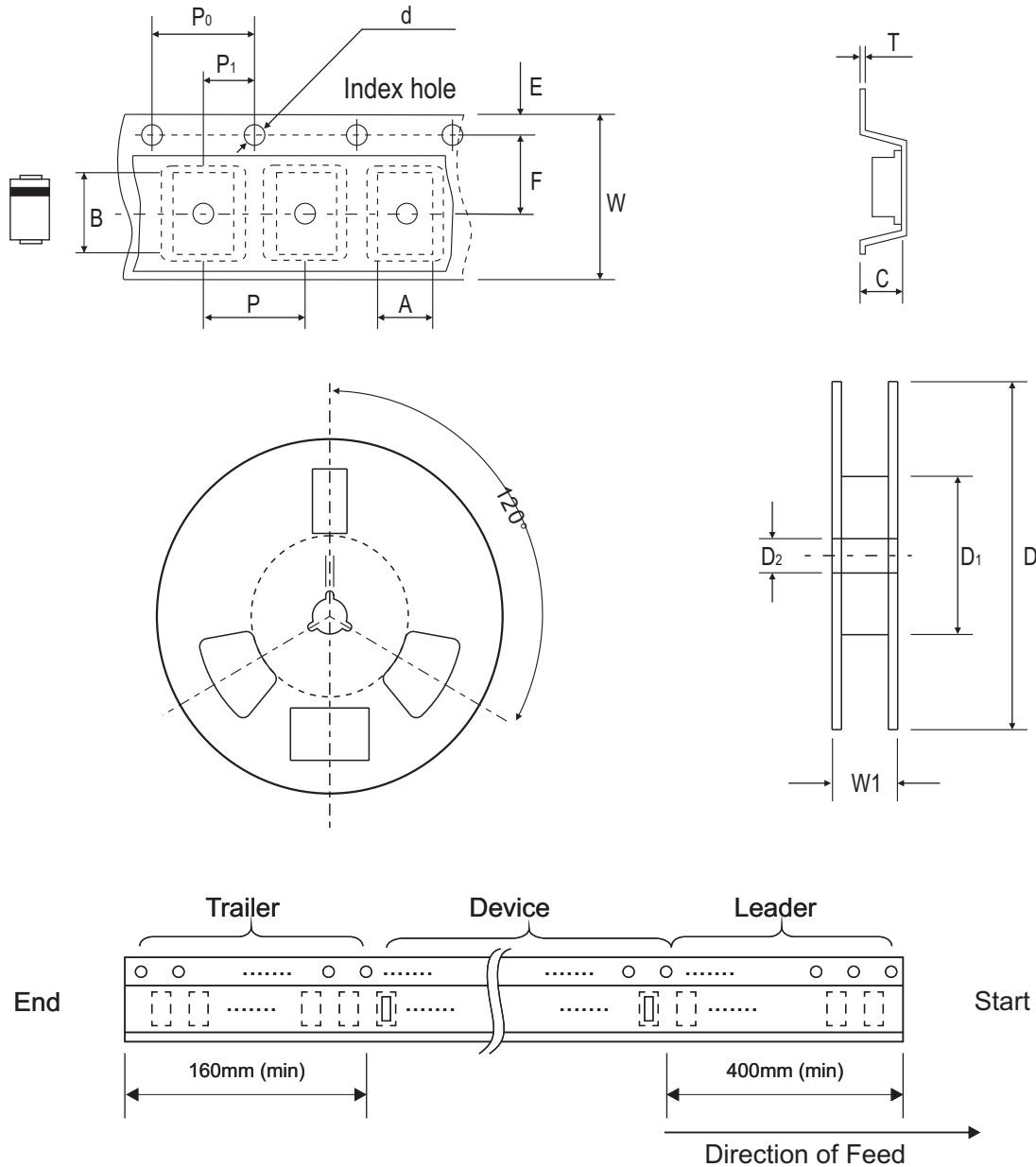


Fig.5 - Total Capacitance VS. Reverse Voltage



Reel Taping Specification



| DO-214AC (SMA) | SYMBOL | A | B | C | d | D | D ₁ | D ₂ |
|-------------------|--------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|
| | (mm) | 2.70 ± 0.10 | 5.30 ± 0.10 | 2.66 ± 0.10 | 1.50 ± 0.10 | 330.00 ± 2.00 | 62.00 MIN. | 13.50 ± 0.50 |
| | (inch) | 0.106 ± 0.004 | 0.209 ± 0.004 | 0.105 ± 0.004 | 0.059 ± 0.004 | 12.99 ± 0.079 | 2.441 MIN. | 0.531 ± 0.020 |

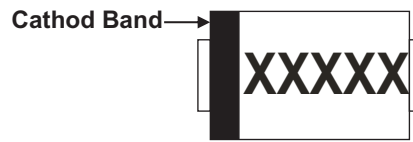
| DO-214AC (SMA) | SYMBOL | E | F | P | P ₀ | P ₁ | T | W | W ₁ |
|-------------------|--------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| | (mm) | 1.75 ± 0.10 | 5.50 ± 0.10 | 4.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.10 | 0.60 ± 0.10 | 12.00 ± 0.30 | 18.40 ± 1.00 |
| | (inch) | 0.069 ± 0.004 | 0.217 ± 0.004 | 0.157 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.004 | 0.236 ± 0.004 | 0.472 ± 0.012 | 0.724 ± 0.039 |

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Marking Code

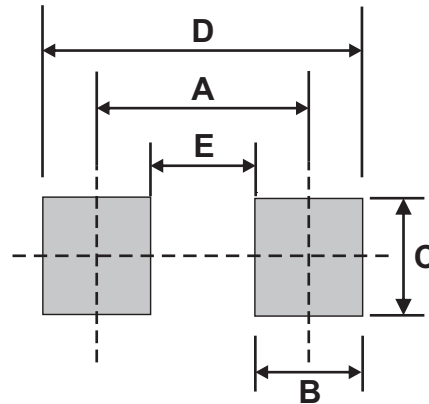
| Part Number | Marking Code |
|--------------|--------------|
| CDBA240LL-HF | SLL24 |



XXXXXX = Product type marking code

Suggested PAD Layout

| SIZE | DO-214AC (SMA) | |
|------|----------------|--------|
| | (mm) | (inch) |
| A | 4.10 | 0.161 |
| B | 2.60 | 0.102 |
| C | 1.70 | 0.067 |
| D | 6.70 | 0.264 |
| E | 1.50 | 0.059 |



Standard Packaging

| Case Type | REEL PACK | |
|----------------|--------------|------------------|
| | REEL (pcs) | Reel Size (inch) |
| DO-214AC (SMA) | 5,000 | 13 |