

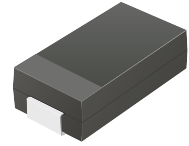
CDBA320-G Thru. CDBA3100-G

Reverse Voltage: 20 to 100 Volts

Forward Current: 3.0 Amp

RoHS Device

Halogen Free

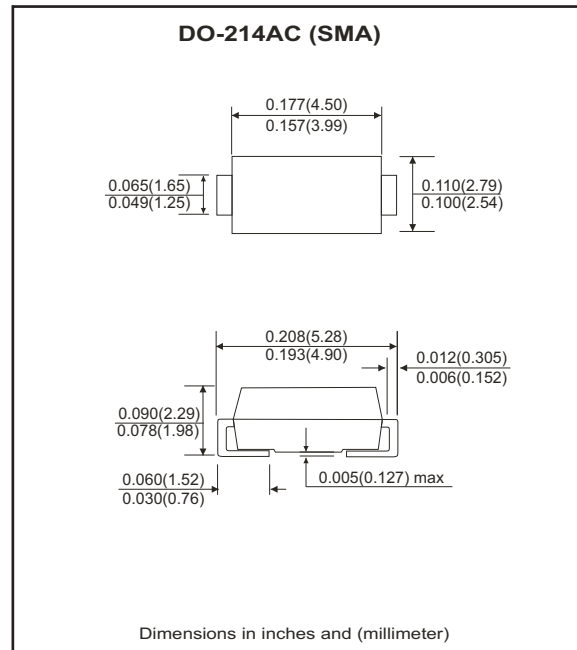


Features

- Ideal for surface mount applications.
- Easy pick and place.
- Plastic package has Underwriters Lab. flammability classification 94V-0.
- Built-in strain relief.
- Low forward voltage drop.

Mechanical data

- Case: JEDEC DO-214AC, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Approx. weight: 0.063 grams



Maximum Ratings and Electrical Characteristics

| Parameter | Symbol | CDBA 320-G | CDBA 340-G | CDBA 360-G | CDBA 380-G | CDBA 3100-G | Units |
|--|-----------------|-------------|------------|------------|------------|-------------|---------------|
| Max. repetitive peak reverse voltage | V_{RRM} | 20 | 40 | 60 | 80 | 100 | V |
| Max. DC blocking voltage | V_{DC} | 20 | 40 | 60 | 80 | 100 | V |
| Max. RMS voltage | V_{RMS} | 14 | 28 | 42 | 56 | 70 | V |
| Peak surge forward current, 8.3ms single half sine-wave superimposed on rate load (JEDEC method) | I_{FSM} | 80 | | | | | A |
| Max. average forward current | I_o | 3.0 | | | | | A |
| Max. instantaneous forward voltage at 3.0A | V_F | 0.50 | | 0.70 | | 0.85 | V |
| Max. DC reverse current at $T_A=25^{\circ}C$ rated DC blocking voltage $T_A=100^{\circ}C$ | I_R | 0.5 | | | | | mA |
| | | 20 | | 10 | | | |
| Max. thermal resistance (Note 1) | $R_{\theta JA}$ | 50 | | | | | $^{\circ}C/W$ |
| | $R_{\theta JL}$ | 12 | | | | | |
| Max. operating junction temperature | T_J | -55 to +150 | | | | | $^{\circ}C$ |
| Storage temperature | T_{STG} | -55 to +150 | | | | | $^{\circ}C$ |

Notes: 1. Thermal resistance from junction to ambient and junction to lead mounted on P.C.B. with 0.2x0.2 inch copper pad area.

RATING AND CHARACTERISTIC CURVES (CDBA320-G thru CDBA3100-G)

Fig.1- Typical Forward Current Derating Curve

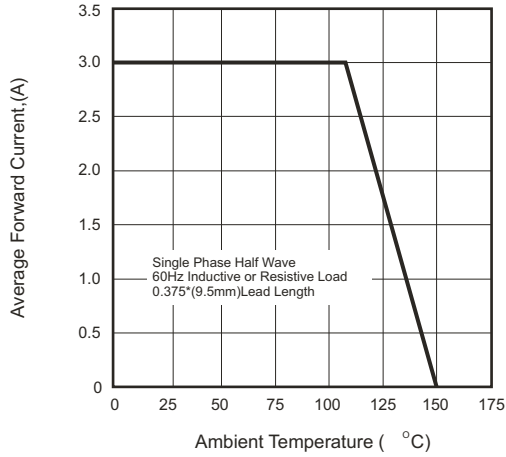


Fig.2- Non-repetitive Forward Surge Current

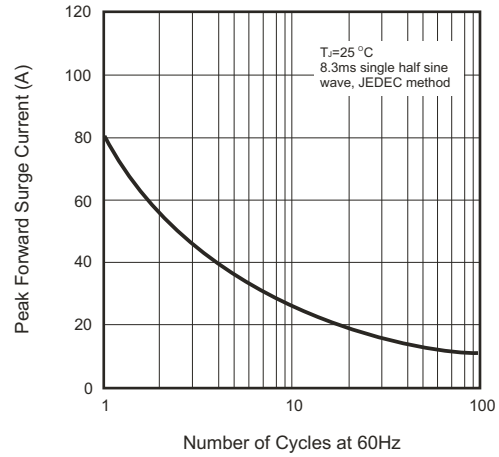


Fig.3- Forward Characteristics

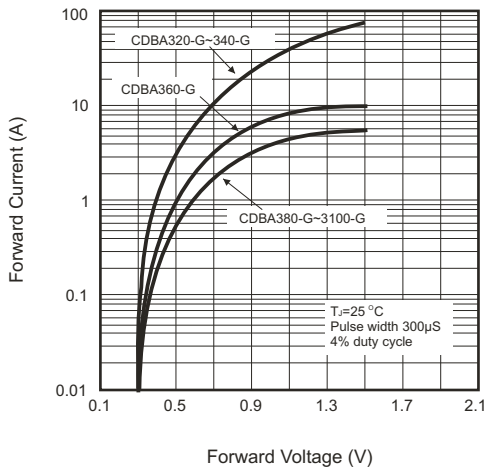


Fig.4- Reverse Characteristics

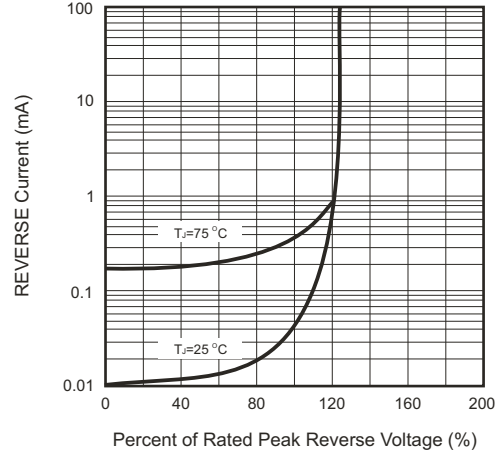
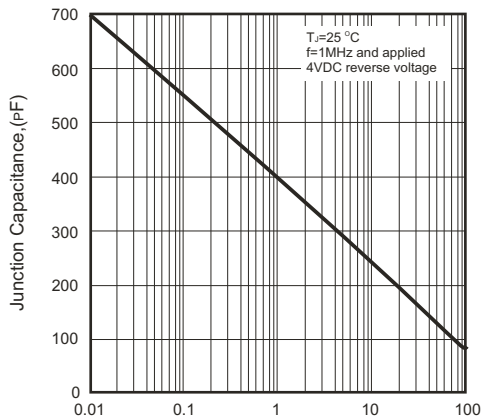
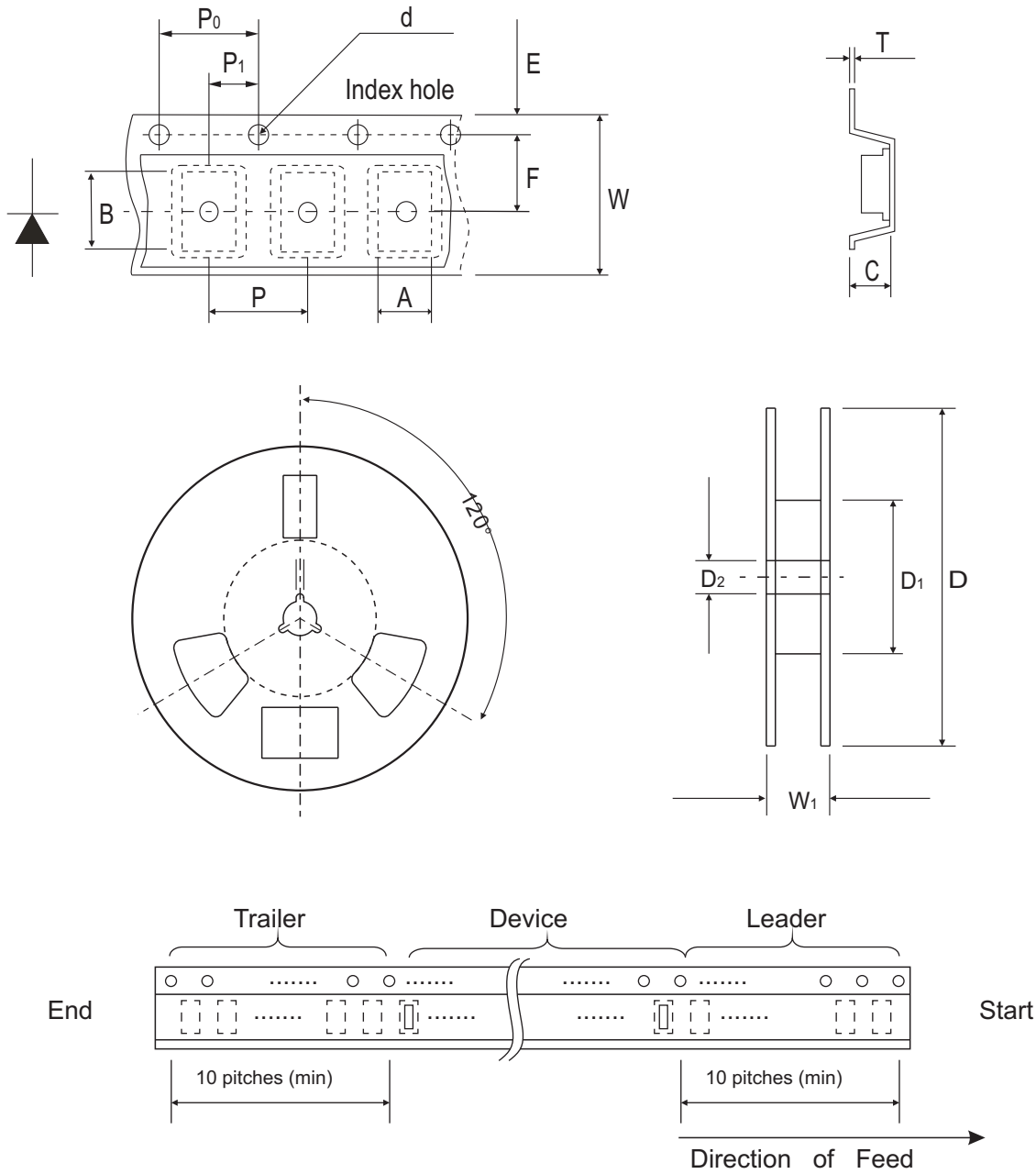


Fig.5- Junction Capacitance



Reel Taping Specification

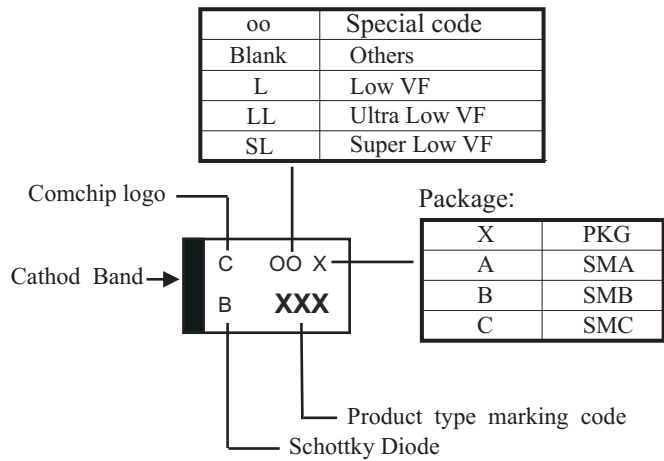


| DO-214AC (SMA) | SYMBOL | A | B | C | d | D | D1 | D2 |
|-------------------|--------|-----------|-----------|-----------|---------------|---------------|------------|---------------|
| | (mm) | 2.7 Max | 5.3 Max | 2.66 Max | 1.50 ± 0.10 | 330 ± 2.00 | 50.0 Min. | 13.5 ± 1.00 |
| | (inch) | 0.106 Max | 0.209 Max | 0.105 Max | 0.059 ± 0.004 | 13.00 ± 0.079 | 1.969 Min. | 0.531 ± 0.039 |

| DO-214AC (SMA) | SYMBOL | E | F | P | P0 | P1 | W | W1 |
|-------------------|--------|---------------|---------------|---------------|---------------|---------------|---------------|-----------|
| | (mm) | 1.75 ± 0.10 | 5.50 ± 0.05 | 4.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.05 | 12.0 ± 0.30 | 18.4 Max. |
| | (inch) | 0.069 ± 0.004 | 0.216 ± 0.002 | 0.157 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.002 | 0.472 ± 0.012 | 0.724 Max |

Marking Code

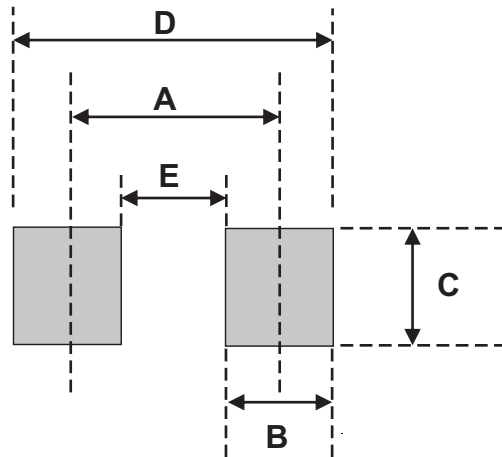
| Part Number | Marking Code |
|-------------|--------------|
| CDBA320-G | 320 |
| CDBA340-G | 340 |
| CDBA360-G | 360 |
| CDBA380-G | 380 |
| CDBA3100-G | 3100 |



xxx/xxxx = Product type marking code

Suggested PAD Layout

| SIZE | DO-214AC (SMA) | |
|------|----------------|--------|
| | (mm) | (inch) |
| A | 4.50 | 0.177 |
| B | 1.50 | 0.059 |
| C | 3.60 | 0.142 |
| D | 6.00 | 1.298 |
| E | 3.00 | 0.118 |



Standard Packaging

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