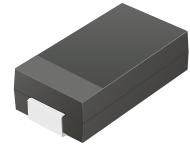


## CDBA220-G Thru. CDBA2100-G

Reverse Voltage: 20 to 100 Volts

Forward Current: 2.0 Amp

RoHS Device

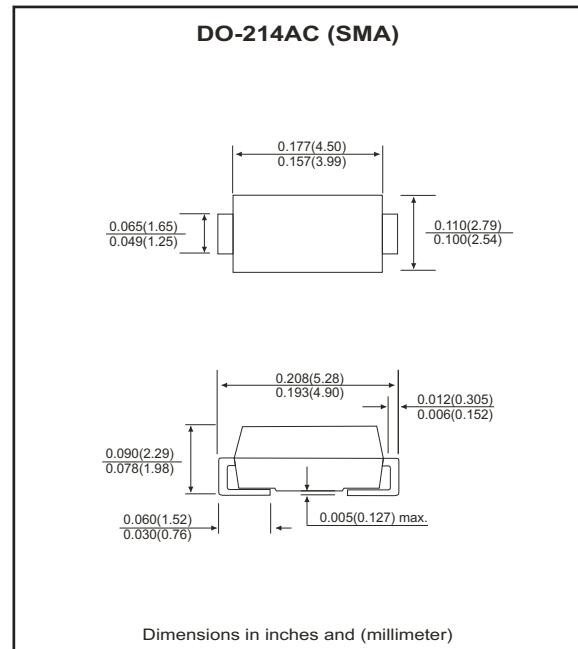


### Features

- 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: 0.064 grams



### Maximum Ratings and Electrical Characteristics

| Parameter                                                                                            | Symbol                               | CDBA 220-G  | CDBA 240-G | CDBA 260-G | CDBA 280-G | CDBA 2100-G | Units |
|------------------------------------------------------------------------------------------------------|--------------------------------------|-------------|------------|------------|------------|-------------|-------|
| Max. repetitive peak reverse voltage                                                                 | V <sub>RRM</sub>                     | 20          | 40         | 60         | 80         | 100         | V     |
| Max. DC blocking voltage                                                                             | V <sub>DC</sub>                      | 20          | 40         | 60         | 80         | 100         | V     |
| Max. RMS voltage                                                                                     | V <sub>RMS</sub>                     | 14          | 28         | 42         | 56         | 70          | V     |
| Peak surge forward current, 8.3ms single half sine-wave superimposed on rate load (JEDEC method)     | I <sub>FSM</sub>                     | 50          |            |            |            |             | A     |
| Max. average forward current                                                                         | I <sub>O</sub>                       | 2.0         |            |            |            |             | A     |
| Max. instantaneous forward voltage at 2.0A                                                           | V <sub>F</sub>                       | 0.50        |            | 0.70       | 0.85       |             | V     |
| Max. DC reverse current at T <sub>A</sub> =25 °C<br>rated DC blocking voltage T <sub>A</sub> =100 °C | I <sub>R</sub>                       | 0.5<br>10   |            |            |            |             | mA    |
| Max. thermal resistance (Note 1)                                                                     | R <sub>θJA</sub><br>R <sub>θJL</sub> | 75<br>17    |            |            |            |             | °C/W  |
| Max. operating junction temperature                                                                  | T <sub>J</sub>                       | 125         |            |            |            |             | °C    |
| Storage temperature                                                                                  | T <sub>STG</sub>                     | -65 to +150 |            |            |            |             | °C    |

Notes: 1. Thermal resistance from junction to ambient and junction to lead mounted on P.C.B. with 5.0×5.0 mm copper pad area.

## RATING AND CHARACTERISTIC CURVES (CDBA220-G thru CDBA2100-G)

Fig.1 Reverse Characteristics

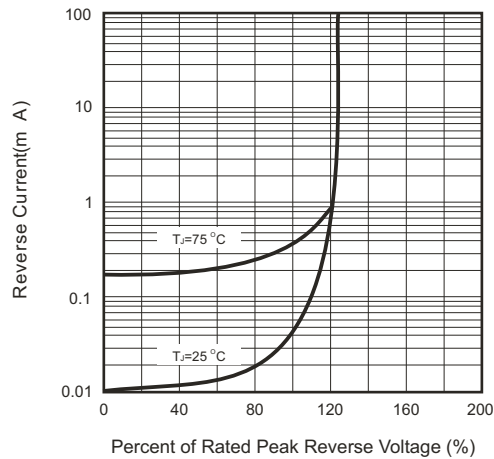


Fig.2 Forward Characteristics

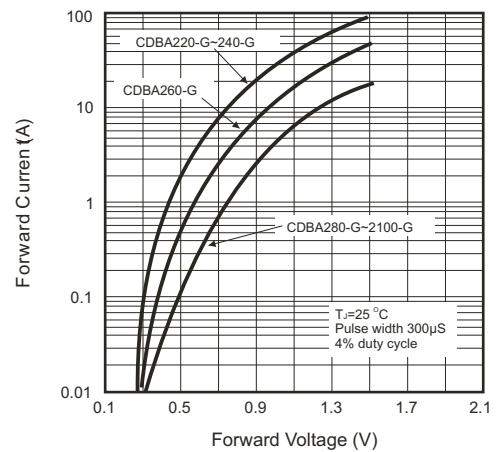


Fig.3 Junction Capacitance

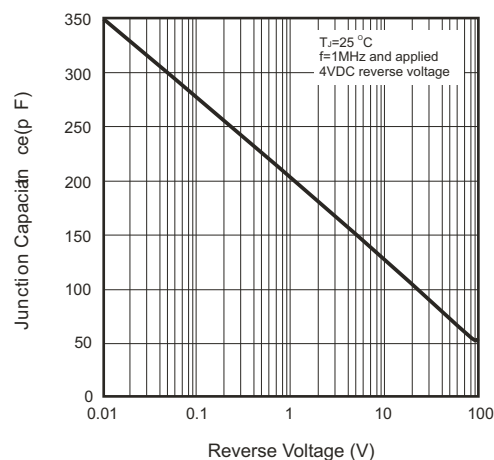


Fig.4 Current Derating Curve

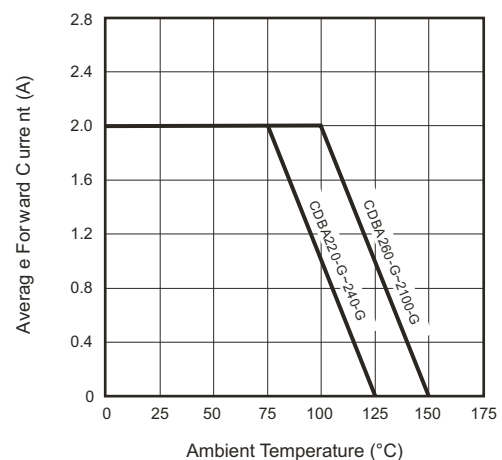
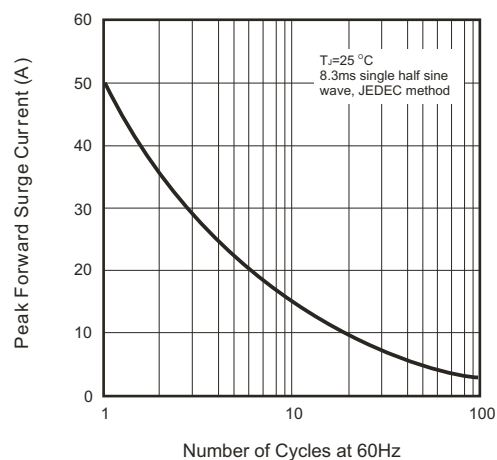
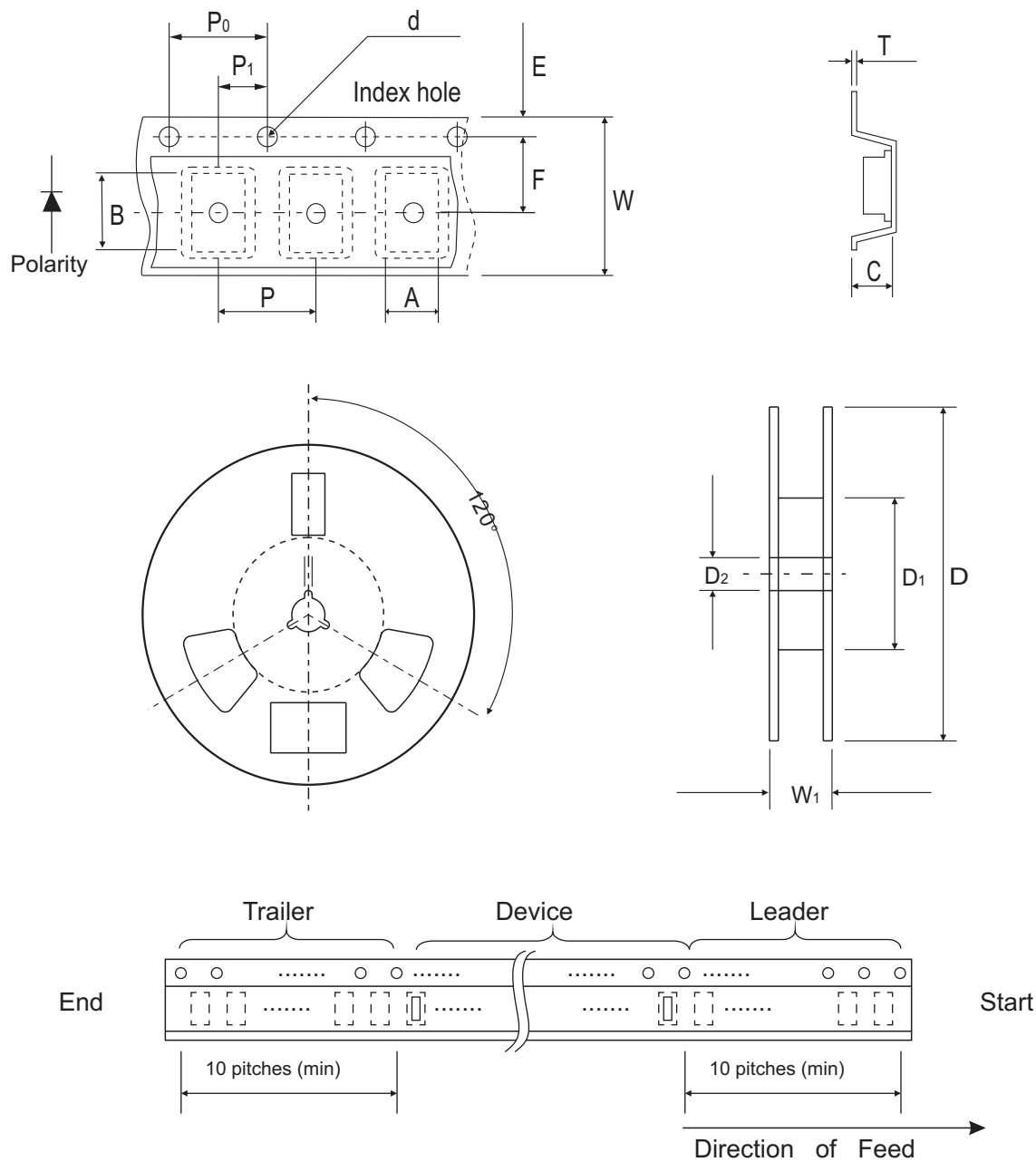


Fig.5 Non-repetitive Forward Surge Current



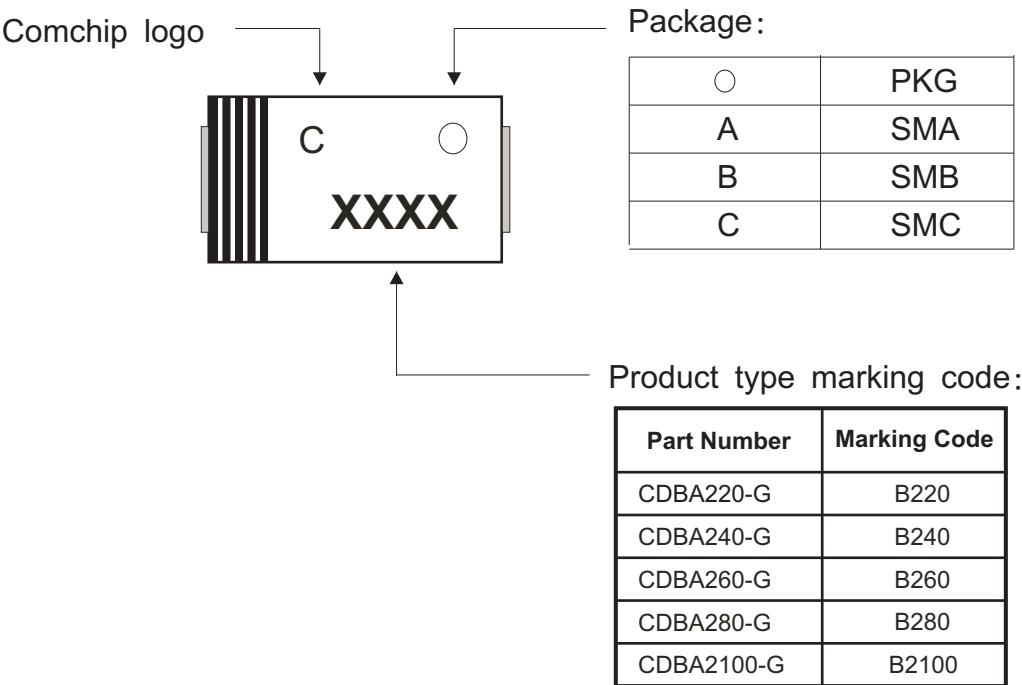
## Reel Taping Specification



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

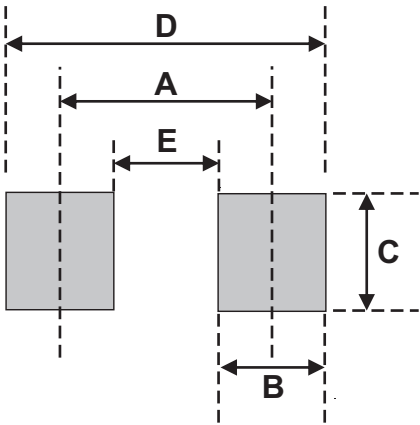
| DO-214AC<br>(SMA) | SYMBOL | E                 | F                 | P                 | P0                | P1                | W                 | W1        |
|-------------------|--------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-----------|
|                   | (mm)   | $1.75 \pm 0.10$   | $5.50 \pm 0.05$   | $4.00 \pm 0.10$   | $4.00 \pm 0.10$   | $2.00 \pm 0.05$   | $12.0 \pm 0.30$   | 18.4 Max. |
|                   | (inch) | $0.689 \pm 0.004$ | $0.216 \pm 0.002$ | $0.157 \pm 0.004$ | $0.157 \pm 0.004$ | $0.079 \pm 0.002$ | $0.472 \pm 0.012$ | 0.724 Max |

## Marking Code



## Suggested PAD Layout

| SIZE | DO-214AC(SMA) |        |
|------|---------------|--------|
|      | (mm)          | (inch) |
| A    | 3.80          | 0.150  |
| B    | 1.60          | 0.063  |
| C    | 2.80          | 0.110  |
| D    | 5.40          | 0.213  |
| E    | 2.20          | 0.087  |



## Standard Packaging

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

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