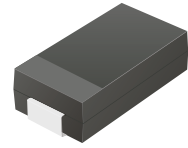


CDBB320-G Thru. CDBB3100-G

Reverse Voltage: 20 to 100 Volts

Forward Current: 3.0 Amp

RoHS Device

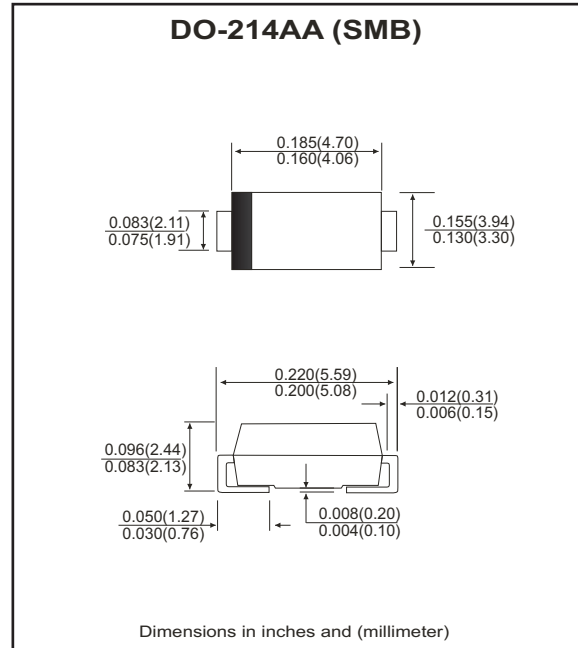


Features

- 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-214AA, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Approx. weight: 0.093 grams



Maximum Ratings and Electrical Characteristics

| Parameter | Symbol | CDBB 320-G | CDBB 340-G | CDBB 360-G | CDBB 380-G | CDBB 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 $T_A=25\text{ }^\circ\text{C}$ rated DC blocking voltage $T_A=100\text{ }^\circ\text{C}$ | I_R | 0.5 | | | | | mA |
| | | 20 | | | 10 | | |
| Max. thermal resistance (Note 1) | $R_{\theta JA}$ | 50 | | | | | $^\circ\text{C/W}$ |
| | $R_{\theta JL}$ | 10 | | | | | |
| Max. operating junction temperature | T_J | 125 | | | | | $^\circ\text{C}$ |
| Storage temperature | T_{STG} | -65 to +150 | | | | | $^\circ\text{C}$ |

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

RATING AND CHARACTERISTIC CURVES (CDBB320-G Thru. CDBB3100-G)

Fig.1 Reverse Characteristics

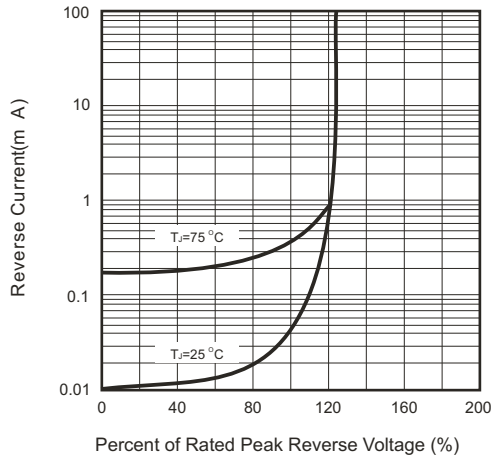


Fig.2 Forward Characteristics

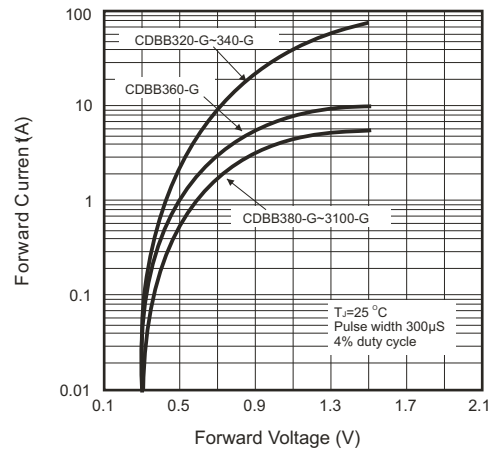


Fig.3 Junction Capacitance

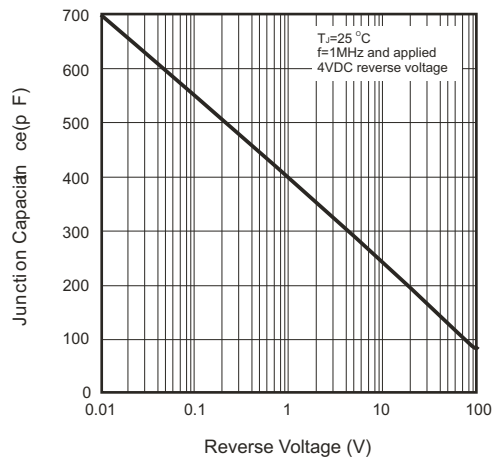


Fig.4 Current Derating Curve

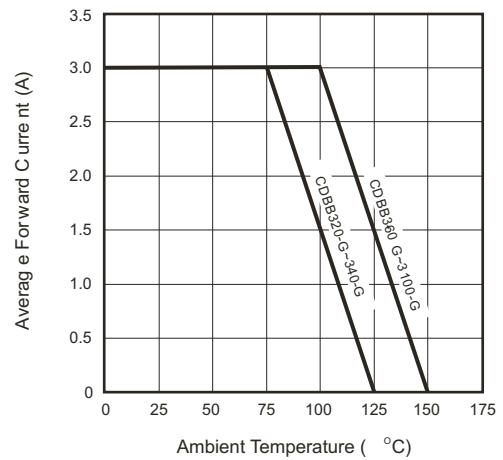
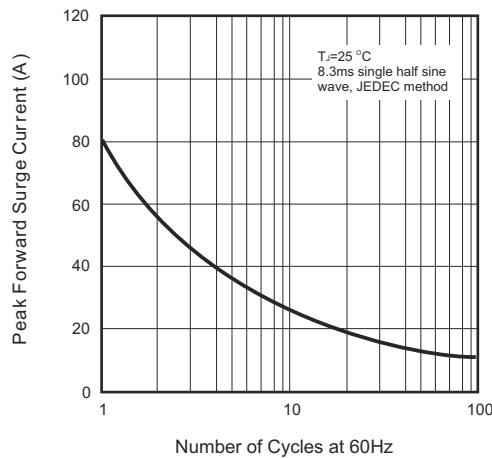
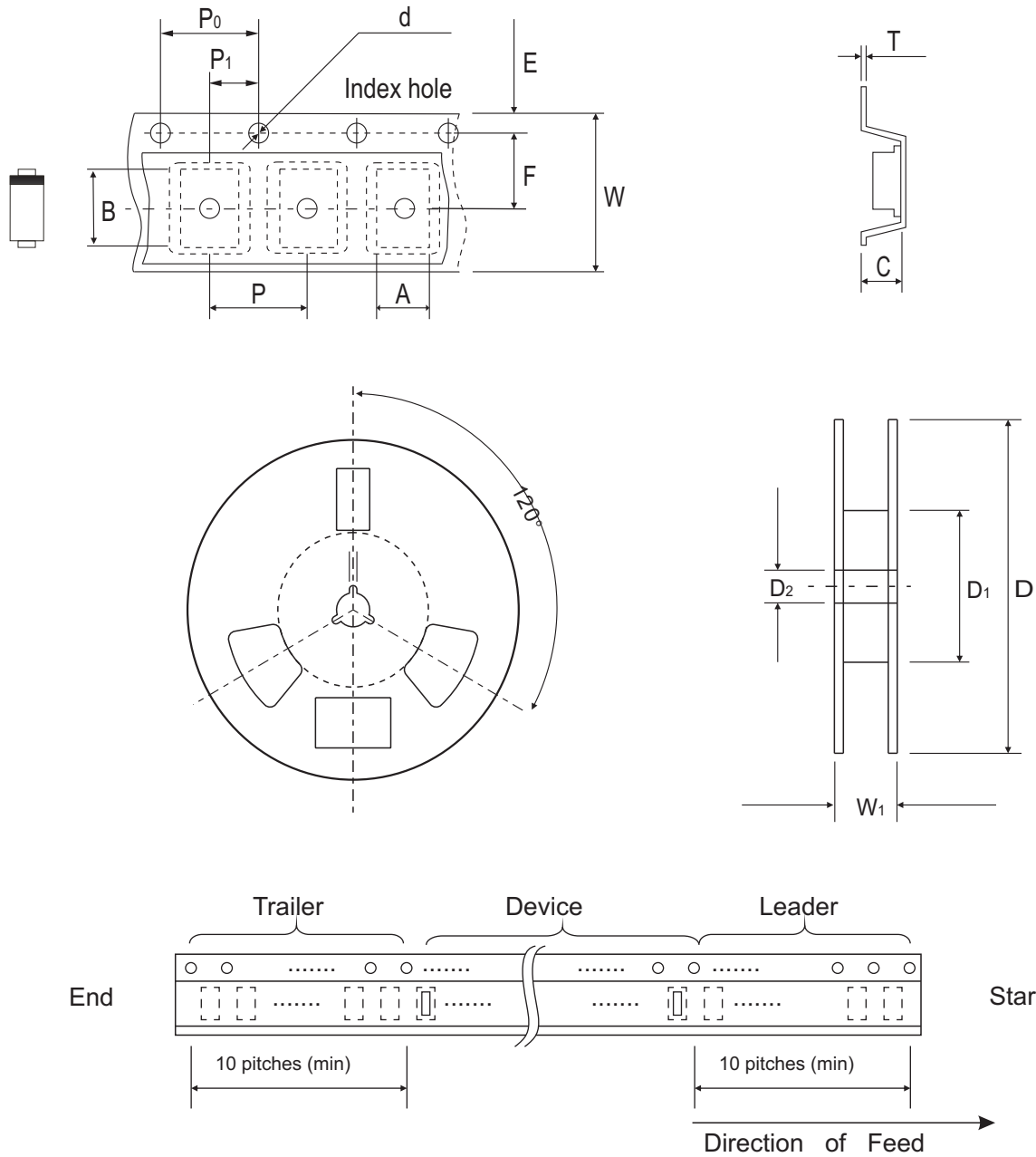


Fig.5 Non-repetitive Forward Surge Current



Reel Taping Specification

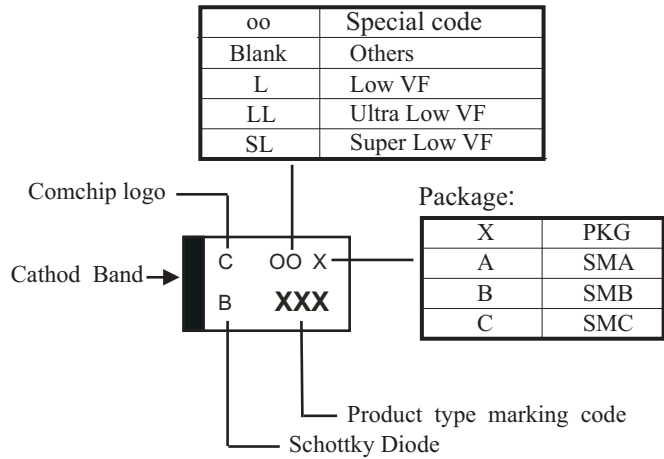


| DO-214AA (SMB) | SYMBOL | A | B | C | d | D | D1 | D2 |
|-------------------|--------|------------|------------|------------|------------------------------|---------------|------------|---------------|
| | (mm) | 4.00 MAX. | 5.90 MAX. | 3.00 MAX. | 1.50 ± 0.10 _{DIA} | 330 ± 2.00 | 50.0 MIN. | 13.50 ± 1.0 |
| | (inch) | 0.157 MAX. | 0.232 MAX. | 0.118 MAX. | 0.059 ± 0.004 _{DIA} | 12.99 ± 0.079 | 1.969 MIN. | 0.531 ± 0.039 |

| DO-214AA (SMB) | SYMBOL | E | F | P | P0 | P1 | T | W | W1 |
|-------------------|--------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------|
| | (mm) | 1.75 ± 0.10 | 5.50 ± 0.05 | 8.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.05 | 0.60 MAX | 12.0 ± 0.30 | 18.4 MAX. |
| | (inch) | 0.069 ± 0.004 | 0.217 ± 0.002 | 0.315 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.004 | 0.236 ± 0.004 | 0.472 ± 0.012 | 0.724 MAX |

Marking Code

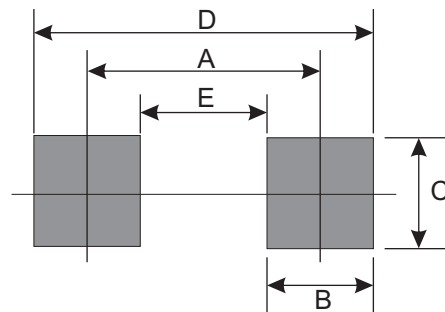
| Part Number | Marking Code |
|-------------|--------------|
| CDBB320-G | 320 |
| CDBB340-G | 340 |
| CDBB360-G | 360 |
| CDBB380-G | 380 |
| CDBB3100-G | 3100 |



xxx/xxxx = Product type marking code

Suggested PAD Layout

| SIZE | DO-214AA(SMB) | |
|------|---------------|--------|
| | (mm) | (inch) |
| A | 4.30 | 0.169 |
| B | 2.50 | 0.098 |
| C | 2.30 | 0.091 |
| D | 6.80 | 0.268 |
| E | 1.80 | 0.071 |



Standard Packaging

| Case Type | REEL PACK | |
|---------------|--------------|------------------|
| | REEL (pcs) | Reel Size (inch) |
| DO-214AA(SMB) | 3,000 | 13 |