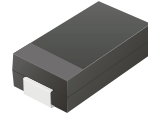


CDBA5817-G Thru CDBA5819-G

Reverse Voltage: 20 - 40 Volts
 Forward Current: 1A or 3 A
 RoHS Device

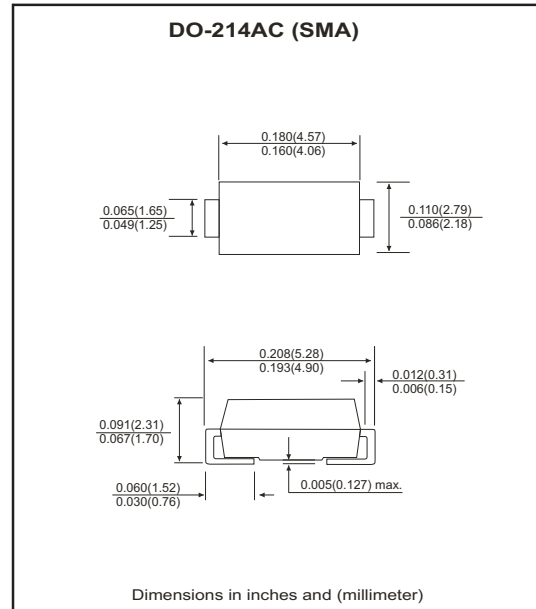


Features

- 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: 0.056 grams



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

| Parameter | Symbol | CDBA5817-G | CDBA5818-G | CDBA5819-G | Unit |
|---|------------------|-------------|------------|------------|------|
| Max. Repetitive Peak Reverse Voltage | V _{RRM} | 20 | 30 | 40 | V |
| Max. DC Bolcking Voltage | V _{DC} | 20 | 30 | 40 | V |
| Max. RMS Voltage | V _{RMS} | 14 | 21 | 28 | V |
| Peak Surge Forward Current 8.3ms single half sine-wave suprimposed on rate load (JEDEC method) | I _{FSM} | 25 | | | A |
| Max. Average Forward Current | I _o | 1 | | | A |
| Max. Thermal Resistance | R _{θJL} | 20 | | | °C/W |
| Storage Temperature | T _{STG} | +125 | | | °C |
| Max. Operating Junction Temperature | T _J | -65 to +150 | | | °C |

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

| Parameter | Symbol | CDBA5817-G | CDBA5818-G | CDBA5819-G | Unit |
|--|----------------|--------------|----------------|--------------|------|
| Max. Forward Voltage at 1.0 A at 3.0 A | V _F | 0.45 0.75 | 0.550 0.775 | 0.60 0.90 | V |
| Max. DC Reverse Current at Rated DC Blocking Voltage Ta = 25°C Ta = 100°C | I _R | 0.5 20 | | | mA |
| Typical Junction Capacitance | C _j | 65 | | | pF |

RATING AND CHARACTERISTIC CURVES (CDBA5817-G Thru CDBA5819-G)

Fig. 1 - Forward characteristics

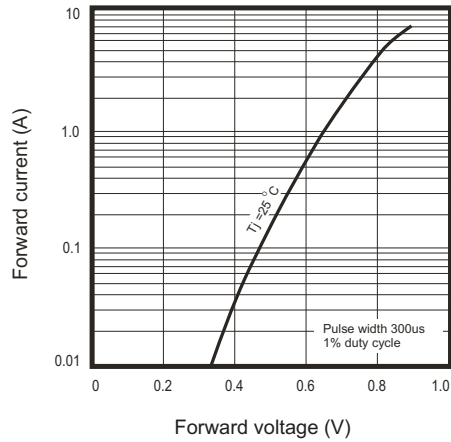


Fig. 2 - Reverse characteristics

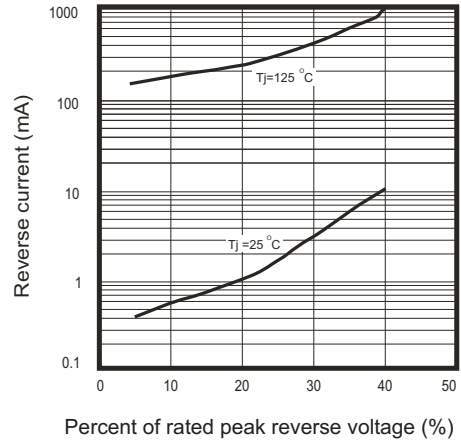


Fig.3 - Capacitance between terminals characteristics

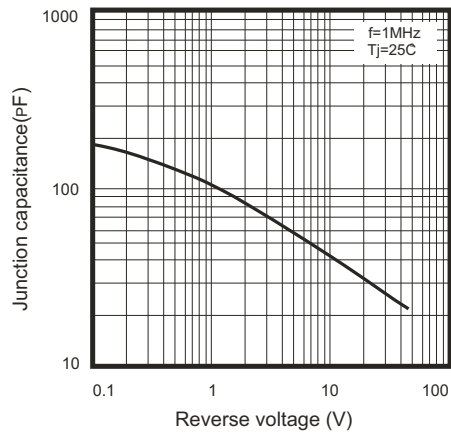


Fig.4 - Current derating curve

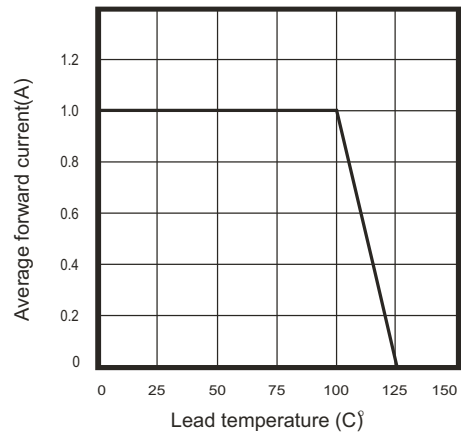
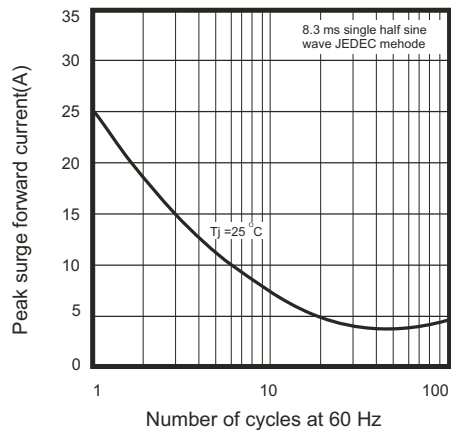
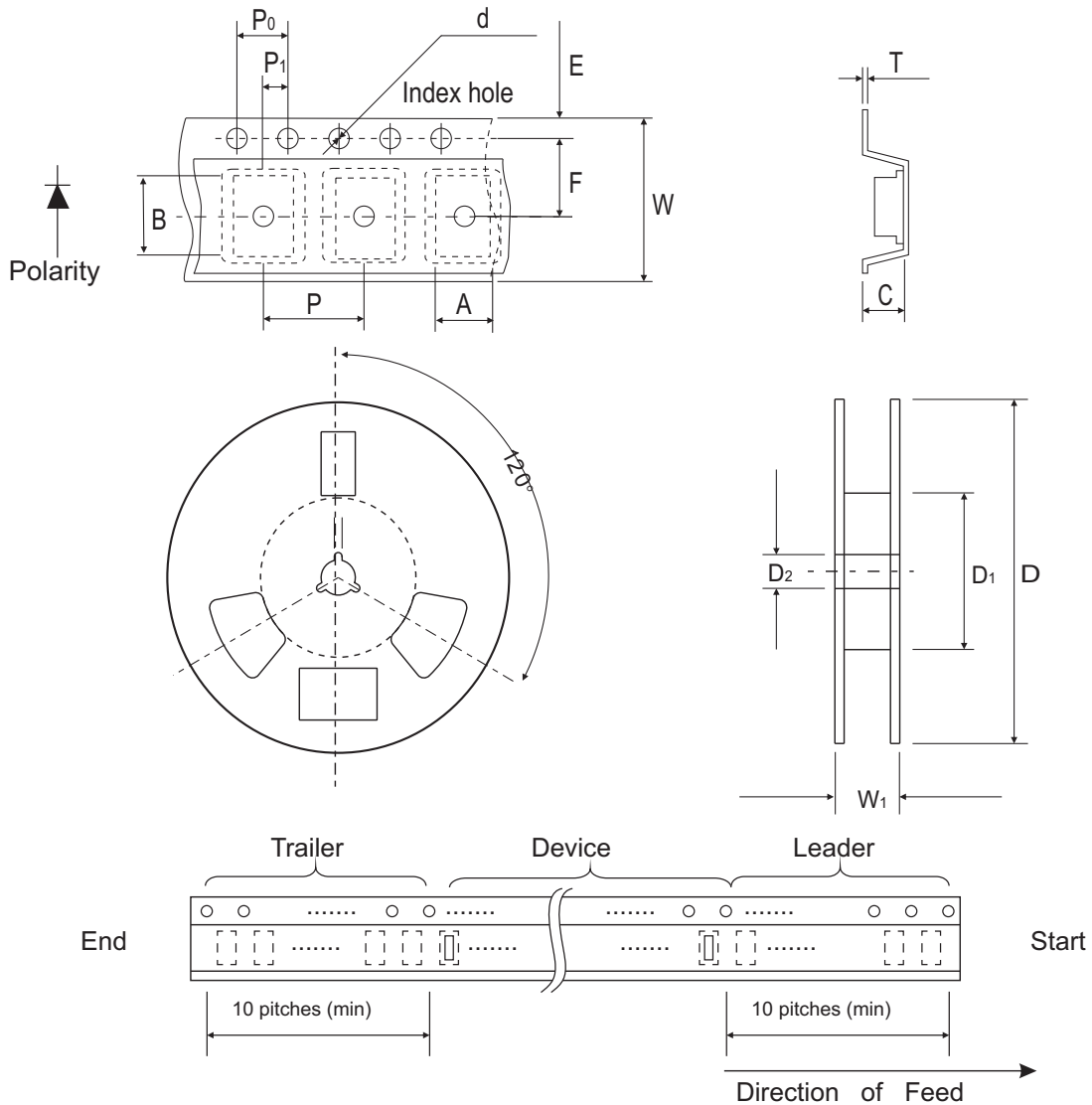


Fig.5 - Non repetitive peak forward surge current



Reel Taping Specification



| SMA (DO-214AC) | SYMBOL | A | B | C | d | D | D ₁ | D ₂ |
|-------------------|--------|-------------|-------------|-------------|---------------|-------|----------------|----------------|
| | (mm) | 2.70 (max) | 5.30 (max) | 2.66 (max) | 1.50 ± 0.10 | 330 | 50.0 MIN. | 13.5 ± 1.00 |
| | (inch) | 0.106 (max) | 0.209 (max) | 0.105 (max) | 0.059 ± 0.004 | 12.99 | 1.969 MIN. | 0.531 ± 0.039 |

| SMA (DO-214AC) | SYMBOL | E | F | P | P ₀ | P ₁ | W | W ₁ |
|-------------------|--------|---------------|---------------|---------------|----------------|----------------|---------------|----------------|
| | (mm) | 1.75 ± 0.10 | 5.50 ± 0.05 | 4.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.05 | 12.0 ± 0.20 | 18.4 (max) |
| | (inch) | 0.689 ± 0.004 | 0.217 ± 0.002 | 0.157 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.002 | 0.472 ± 0.008 | 0.724 (max) |

Marking Code

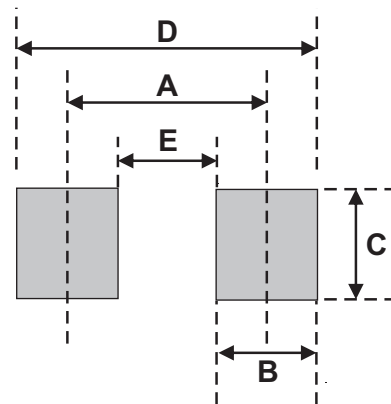
| Part Number | Marking Code |
|-------------|--------------|
| CDBA5817-G | 5817 |
| CDBA5818-G | 5818 |
| CDBA5819-G | 5819 |



xxxx = Product type 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 Package

| Case Type | Qty per Reel | Reel Size |
|----------------|--------------|-----------|
| | (Pcs) | (inch) |
| DO-214AC (SMA) | 5000 | 13 |