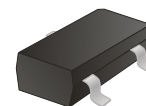


CDSV3-217-G

Reverse Voltage: 80 Volts
Forward Current: 300 mA
RoHS Device



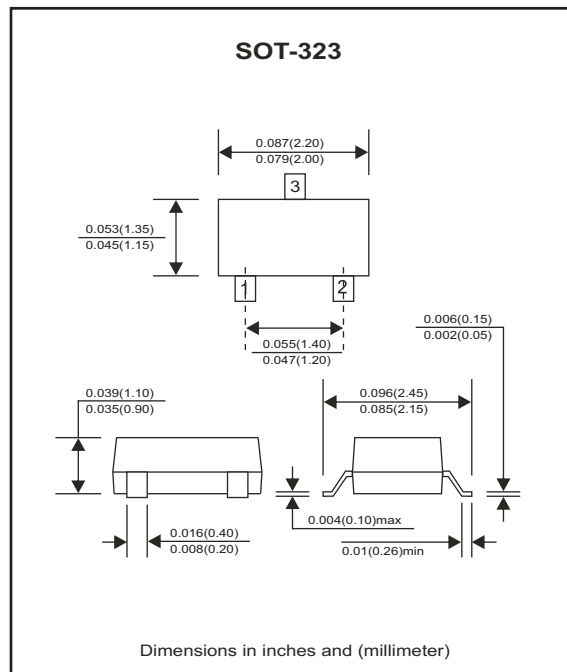
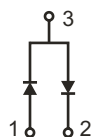
Features

- Designed for mounting on small surface.
- High speed switching.
- High mounting capability, strong surge withstand, high reliability.

Mechanical data

- Case: SOT-323, molded plastic.
- Terminals: Solder plated, solderable per MIL-STD-750, method 208.
- Weight: 0.006 gram(approx.).

CDSV3-217-G



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

| Parameter | Conditions | Symbol | Min | Typ | Max | Unit |
|-----------------------------|------------|------------------|-----|-----|------|------|
| Peak reverse voltage | | V _{RM} | | | 80 | V |
| Reverse voltage | | V _R | | | 80 | V |
| Forward current | | I _{FM} | | | 300 | mA |
| Average forward current | | I _O | | | 100 | mA |
| Forward current, surge peak | T = 10ms | I _{FSM} | | | 1 | A |
| Power dissipation | | P _D | | | 200 | mW |
| Storage temperature | | T _{STG} | -55 | | +125 | °C |
| Junction temperature | | T _J | | | +125 | °C |

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

| Parameter | Conditions | Symbol | Min | Typ | Max | Unit |
|---------------------------|-----------------------------------|-----------------|-----|-----|-----|------|
| Forward voltage | I _F = 100mA | V _F | | | 1.2 | V |
| Reverse current | V _R = 70V | I _R | | | 0.1 | uA |
| Reverse breakdown voltage | I _R = 100uA | V _{BR} | 80 | | | V |
| Junction Capacitance | f=1MHz, and 0 VDC reverse voltage | C _T | | | 2 | pF |

RATING AND CHARACTERISTIC CURVES (CDSV3-217-G)

Fig.1 - Forward characteristics

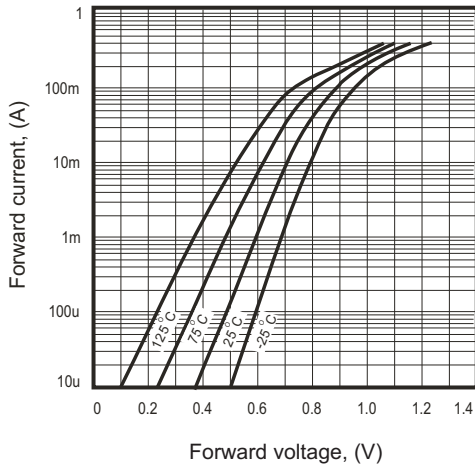


Fig.2 - Reverse characteristics

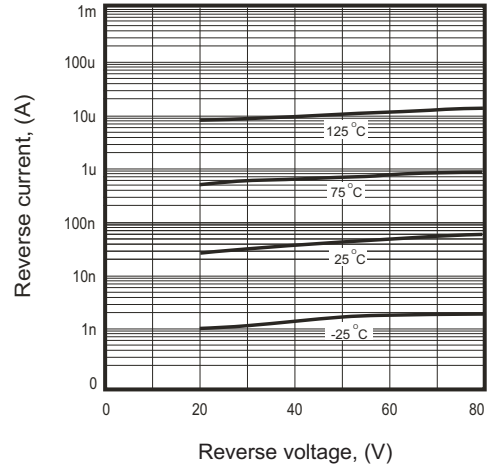


Fig.3 - Capacitance between terminals characteristics

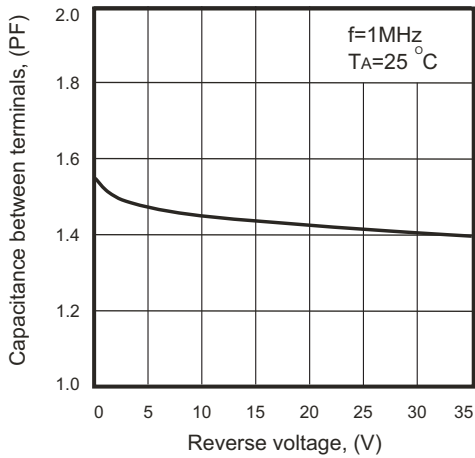
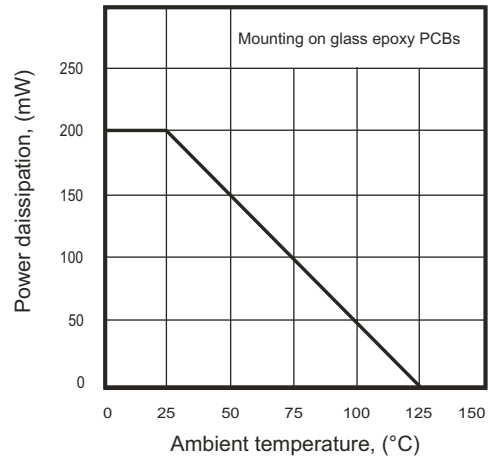
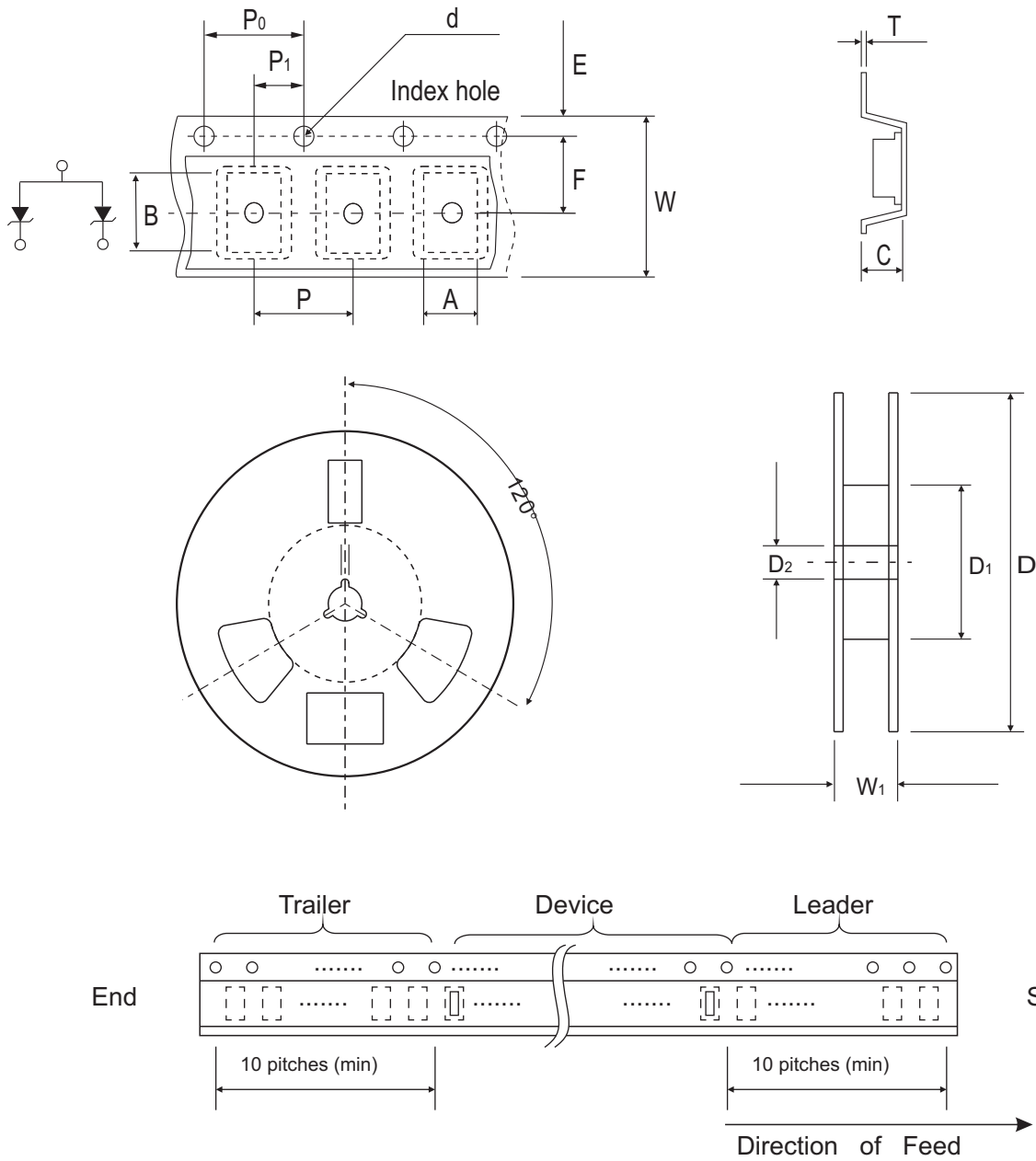


Fig.4 - Power derating curve



Reel Taping Specification

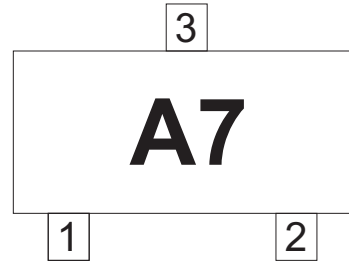


| SOT-323 | SYMBOL | A | B | C | d | D | D1 | D2 |
|---------|--------|---------------|---------------|---------------|---------------|---------------|------------|---------------|
| | (mm) | 2.20 ± 0.10 | 2.40 ± 0.10 | 1.15 ± 0.10 | 1.55 ± 0.10 | 178 ± 1 | 50.0 MIN. | 13.0 ± 0.20 |
| | (inch) | 0.087 ± 0.004 | 0.094 ± 0.004 | 0.045 ± 0.004 | 0.061 ± 0.004 | 7.008 ± 0.040 | 1.969 MIN. | 0.512 ± 0.008 |

| SOT-323 | SYMBOL | E | F | P | P0 | P1 | W | W1 |
|---------|--------|---------------|---------------|---------------|---------------|---------------|---------------|------------|
| | (mm) | 1.75 ± 0.10 | 3.50 ± 0.05 | 4.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.05 | 8.00 ± 0.30 | 14.4 MAX. |
| | (inch) | 0.069 ± 0.004 | 0.138 ± 0.002 | 0.157 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.002 | 0.315 ± 0.012 | 0.567 MAX. |

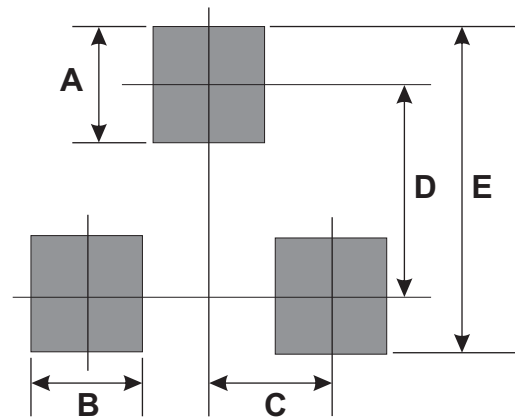
Marking Code

| Park Number | Marking Code |
|-------------|--------------|
| CDSV3-217-G | A7 |



Suggested PAD Layout

| SIZE | SOT-323 | |
|------|---------|--------|
| | (mm) | (inch) |
| A | 0.80 | 0.032 |
| B | 0.80 | 0.032 |
| C | 0.65 | 0.025 |
| D | 1.94 | 0.076 |
| E | 3.88 | 0.152 |



Standard Packaging

| Case Type | REEL PACK | |
|-----------|--------------|------------------|
| | REEL (pcs) | Reel Size (inch) |
| SOT-323 | 3,000 | 7 |