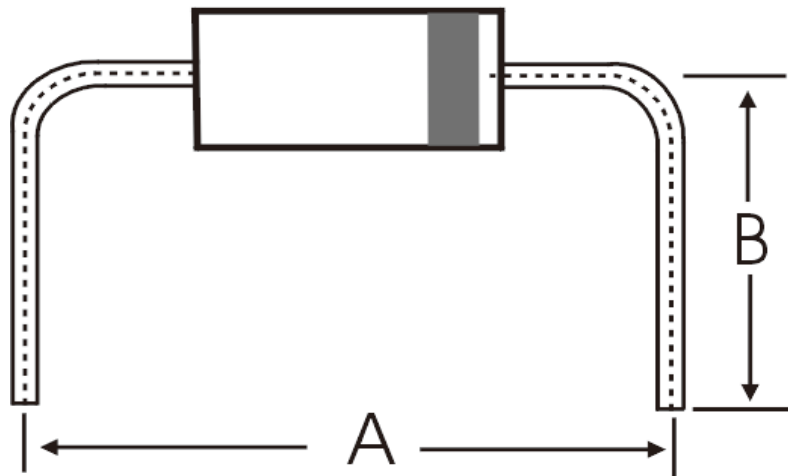


DO-27



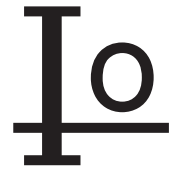
## 附圖尺寸

|    |              |
|----|--------------|
| 圖號 | M403         |
| A  | 15.0 ± 0.5MM |
| B  | 10.0 ± 0.5MM |

|                                                                                               |         |          |                      |        |                  |    |        |
|-----------------------------------------------------------------------------------------------|---------|----------|----------------------|--------|------------------|----|--------|
| UNLESS OTHERWISE SPECIFIED LIMITS<br>ARE : ANGULAR ±0°30'<br>.0 ±.10<br>.00 ±.05<br>.000 ±.01 |         |          | TITLE: 附圖2           |        |                  |    |        |
|                                                                                               |         |          | MAT'L:               | QTY: 1 | FINISH: 2016/9/7 |    |        |
|                                                                                               |         |          | UNIT: mm             | SCALE: | SH'T: 1 OF 1     |    |        |
| DRAWN                                                                                         | CHECKED | APPROVED | DWG. NO.: DIODE-EGO1 |        |                  | A4 | REV: B |
| 周紅意                                                                                           |         | 劉偉       |                      |        |                  |    |        |

# BY251 THRU BY255

## 3.0 AMP SILICON RECTIFIERS



### FEATURES

- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability
- \* Lead Free Finish/RoHS Compliant

### MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 1.04 grams

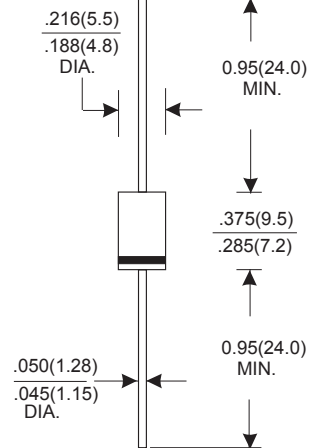
### VOLTAGE RANGE

200 to 1300 Volts

### CURRENT

3.0 Amperes

DO-27



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

| TYPE NUMBER                                                                                           | BY251      | BY252 | BY253 | BY254 | BY255 | UNITS |
|-------------------------------------------------------------------------------------------------------|------------|-------|-------|-------|-------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                                | 200        | 400   | 600   | 800   | 1300  | V     |
| Maximum RMS Voltage                                                                                   | 140        | 280   | 420   | 560   | 910   | V     |
| Maximum DC Blocking Voltage                                                                           | 200        | 400   | 600   | 800   | 1300  | V     |
| Maximum Average Forward Rectified Current<br>.375"(9.5mm) Lead Length at Ta=75°C                      | 3.0        |       |       |       |       | A     |
| Peak Forward Surge Current, 8.3 ms single half sine-wave<br>superimposed on rated load (JEDEC method) | 150        |       |       |       |       | A     |
| Maximum Instantaneous Forward Voltage at 3.0A                                                         | 1.0        |       |       |       |       | V     |
| Maximum DC Reverse Current Ta=25°C                                                                    | 5.0        |       |       |       |       | μA    |
| at Rated DC Blocking Voltage Ta=100°C                                                                 | 50         |       |       |       |       | μA    |
| Typical Junction Capacitance (Note 1)                                                                 | 40         |       |       |       |       | pF    |
| Typical Thermal Resistance RθJA (Note 2)                                                              | 30         |       |       |       |       | °C/W  |
| Operating and Storage Temperature Range Tj, Tstg                                                      | -65 — +150 |       |       |       |       | °C    |

#### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance from Junction to Ambient .375" (9.5mm) lead length.

RATING AND CHARACTERISTIC CURVES (BY251 THRU BY255)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

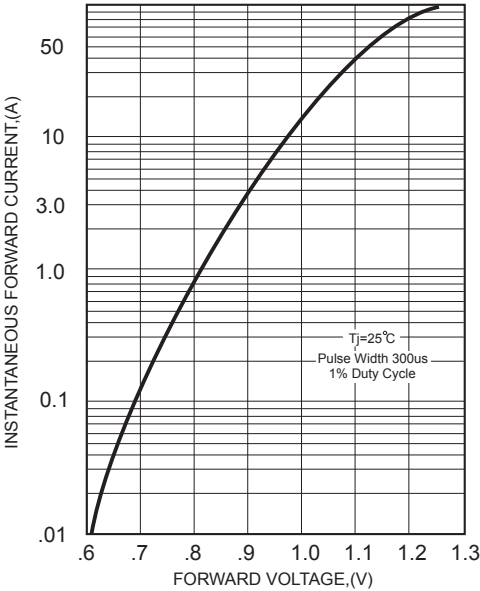


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

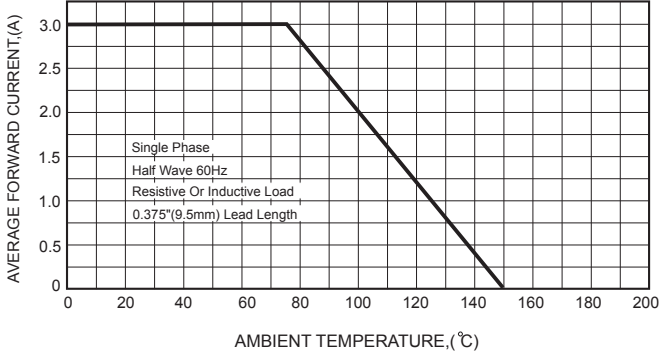


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

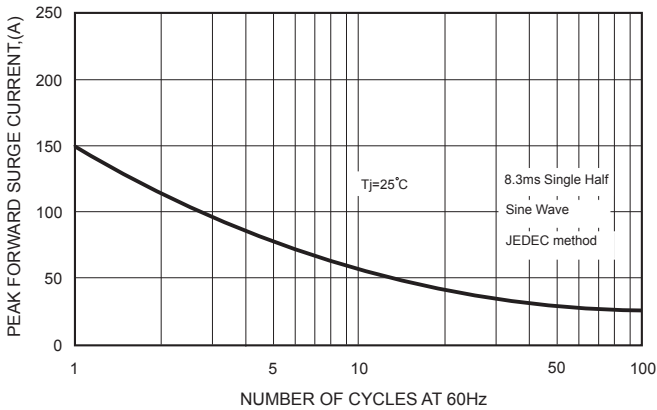


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

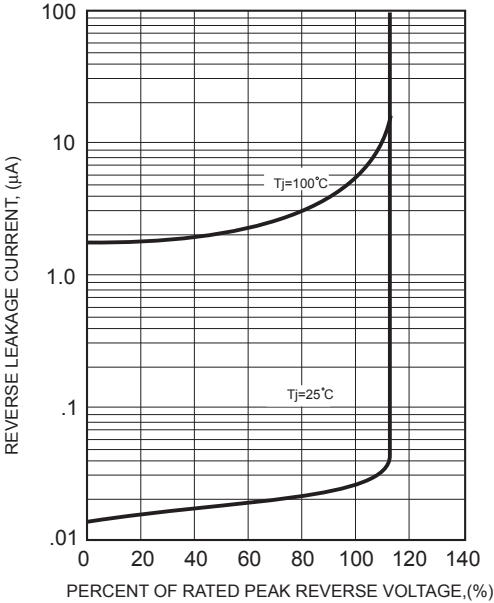


FIG.5-TYPICAL JUNCTION CAPACITANCE

