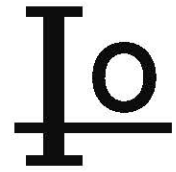


# BY251 THRU BY255

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

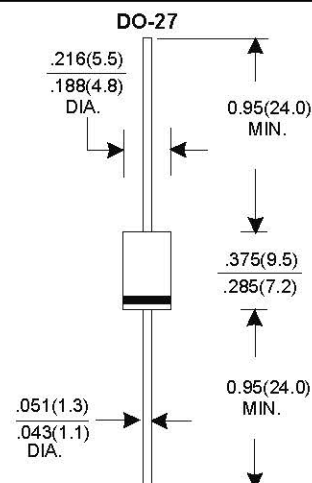
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 1.04 grams

## VOLTAGE RANGE

200 to 1300 Volts

## CURRENT

3.0 Amperes



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						
.375"(9.5mm) Lead Length at Ta=75°C	3.0					A
Peak Forward Surge Current, 8.3 ms single half sine-wave 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

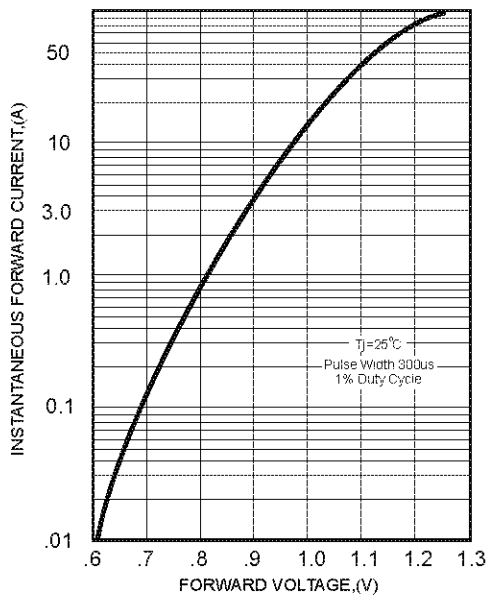


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

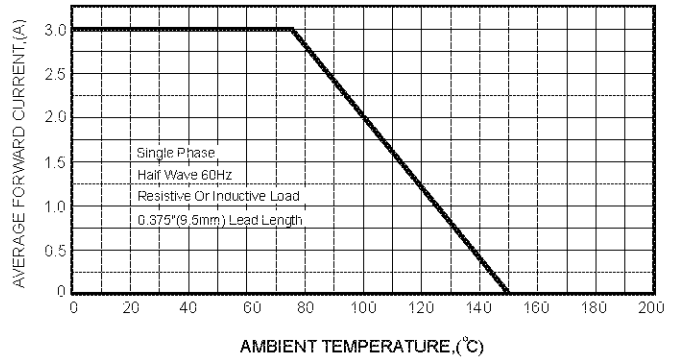


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

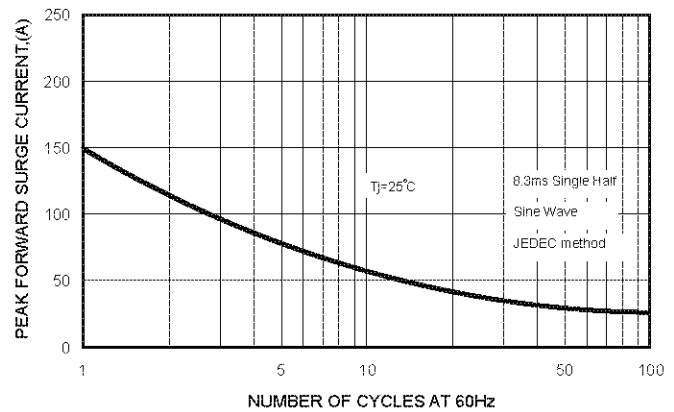


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

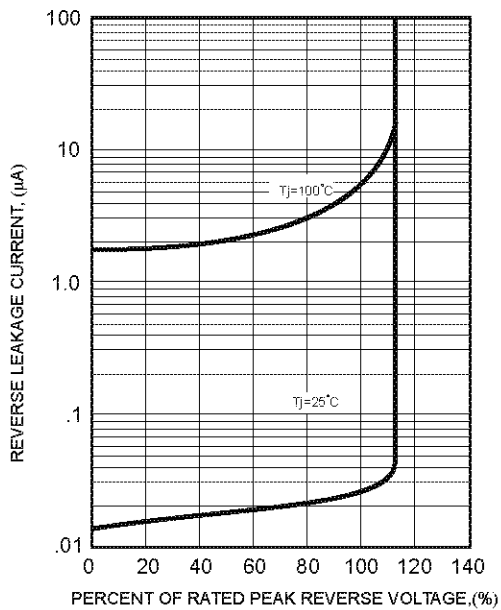
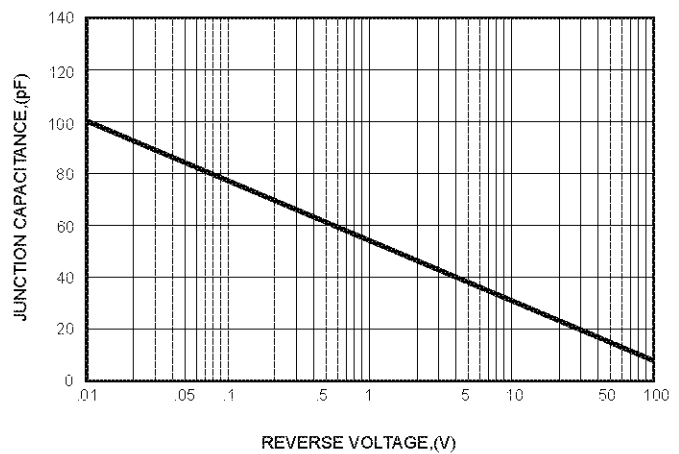
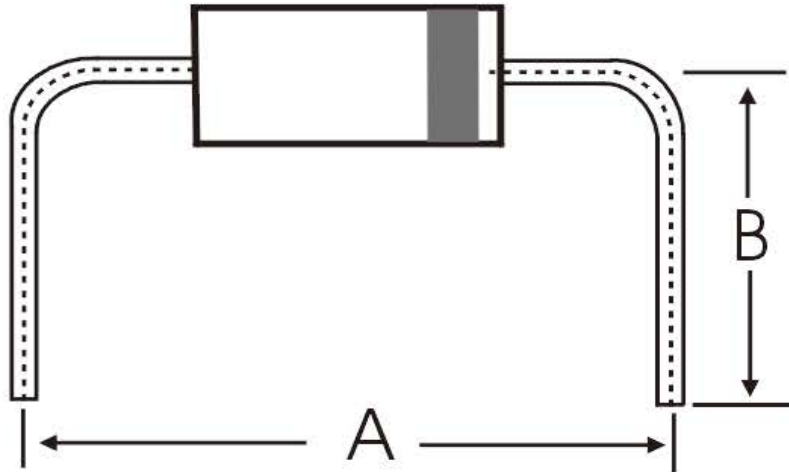


FIG.5-TYPICAL JUNCTION CAPACITANCE



DO-27



附圖尺寸

圖號	M430
A	17.0 ±0.5MM
B	>20.0 不切腳

UNLESS OTHERWISE SPECIFIED LIMITS ARE : ANGULAR ±0°30' .0 ±.10 .00 ±.05 .000 ±.01			TITLE: BY255 M430			
			MAT'L:	QTY: 1	FINISH: 2017/6/7	
			UNT: mm	SCALE:	SHT: 1 OF 1	
DRAWN	CHECKED	APPROVED	DWG. NO.: DIODE-EG01		M4	REV: B
章小梅		劉偉				