

# 1N5844

5.0AMP SCHOTTKY BARRIER RECTIFIERS



## FEATURES

- . Low forward voltage drop
- . High current capability
- . High reliability
- . High surge current capability
- . Epitaxial construction

## MECHANICAL DATA

- . Case: Molded plastic
  - . Epoxy: UL 94V-0 rate flame retardant
  - . Lead: Axial leads, solder able per MIL-STD-202, method 208 guaranteed
  - . Polarity: Color band denotes cathode end
- Mounting position: Any  
Weight: 1.10grams

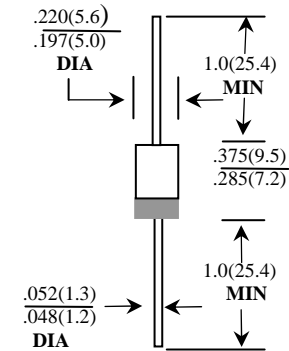
## VOLTAGE RANGE

40 Volts

## CURRENT

5.0AMPERES

## DO-201AD



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	1N5844	UNITS
Maximum Recurrent Peak Reverse Voltage	40	V
Maximum RMS Voltage	28	V
Maximum Voltage	40	V
Maximum Average Forward Rectified Current See Fig. 1	5.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave Superimposed on rated load (JEDEC method)	80	A
Maximum instantaneous Forward Voltage at 5.0A	0.62	V
Maximum DC Reverse Current Ta=25°C	2.0	mA
At Rated DC Blocking Voltage Ta=100°C	20	mA
Typical Junction Capacitance (Note 1)	250	pF
Typical Thermal Resistance R θ JA (Note 2)	20	°C /W
Operating Temperature Range Tj	-65----+125	°C
Storage Temperature Range TSTG	-65----+150	°C

### NOTES:

1. Measured at 1MHz and applied voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

## RATING AND CHARACTERISTIC CURVES (1N5844)

FIG.2-TYPICAL FORWARD CHARACTERISTICS

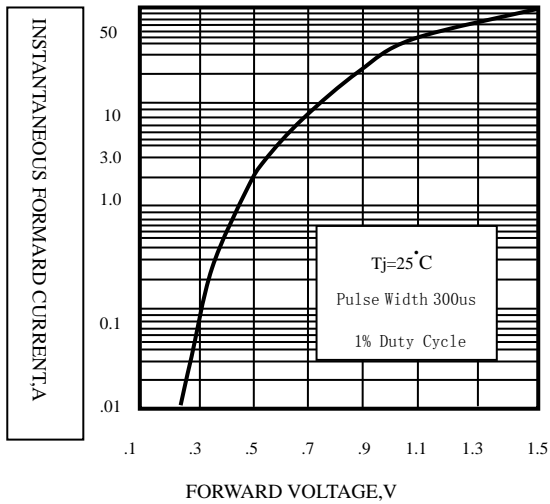


FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

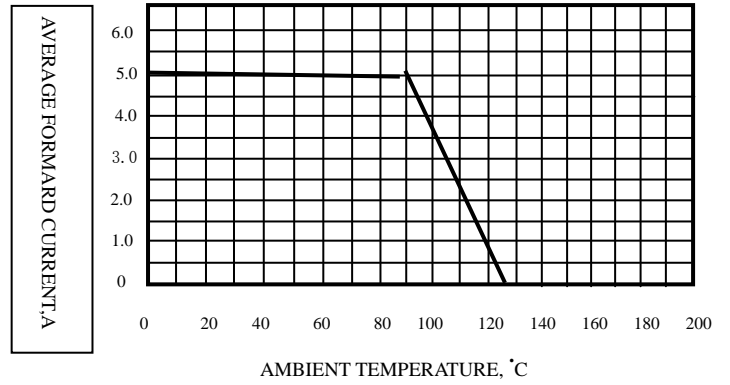


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

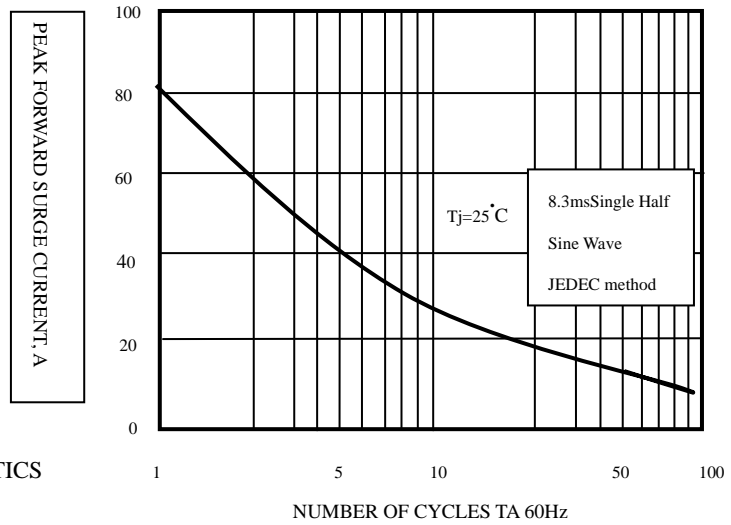


FIG.5-TYPICAL REVERSE CHARACTERISTICS

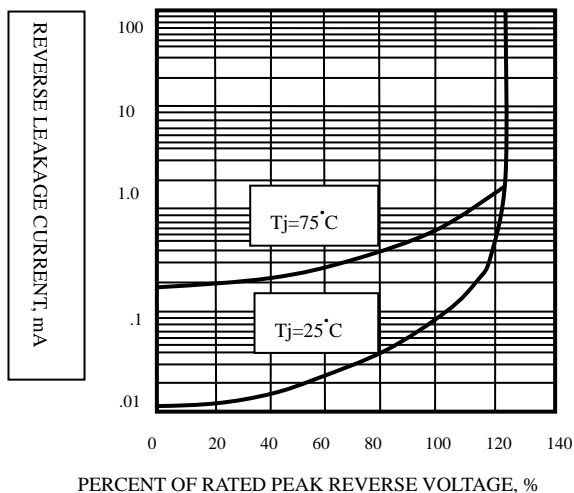


FIG.4-TYPICAL JUNCTION CAPACITANCE

