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

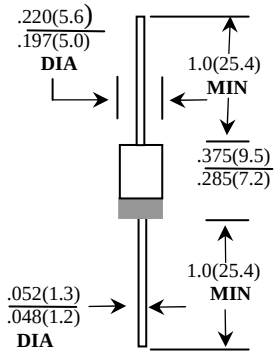
VOLTAGE RANGE

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 0 JA (Note 2)	20	˚C /W
Operating Temperature Range Tj	-65----+125	˚C
Storage Temperature Range T_{STG}	-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

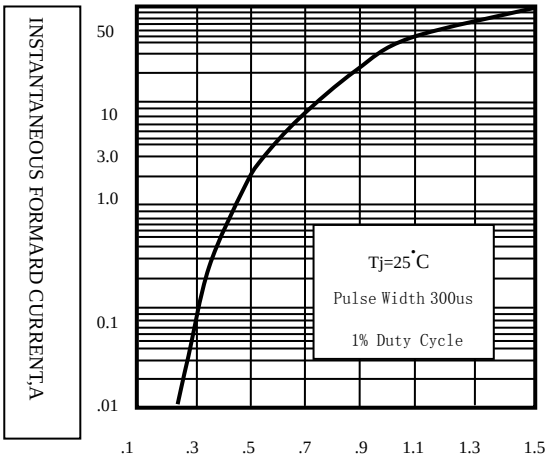


FIG.1-TYPICAL FORWARD CURRENT DERANTING CURVE

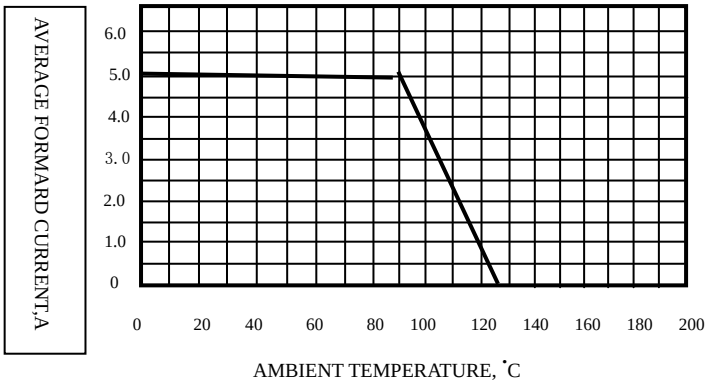


FIG.3-MAXIMUM NON-REPETIEIVE FORWARD SURGE CURRENT

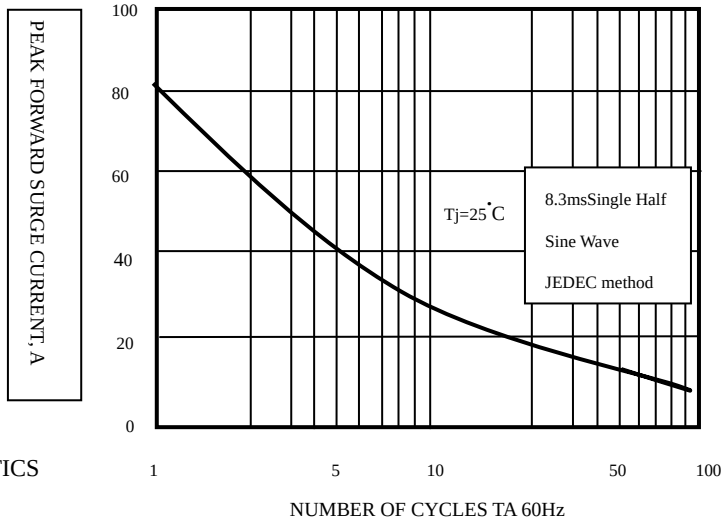


FIG.5-TYPICAL REVERSE CHARACTERISTICS

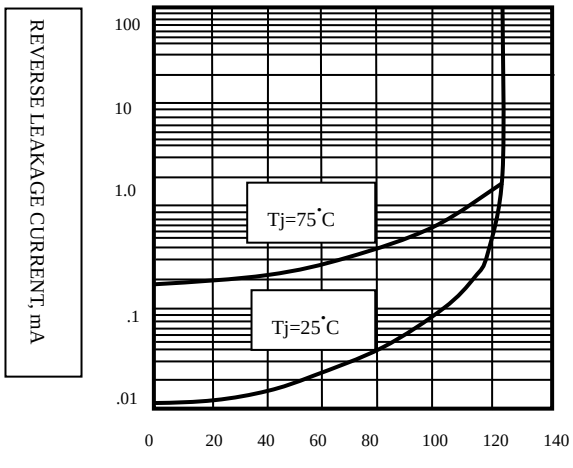


FIG.4-TYPICAL JUNCTION CAPACITANCE