IN5819

SCHOTTKY BARRIER RECTIFIER

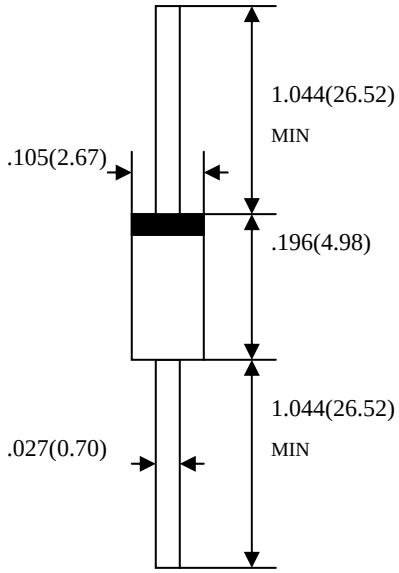
Reverse Voltqge 40 Volts

Forward Current – 1.0Ampere

FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

DO-41



1.0Amp Schottky Barrier Rectifier

Dimensions in inches (mm)

MECHANICAL DATA

- Case：Molded plastic
- Epoxy：UL94-0 rate flame retardant
- Lead：Axial lead solderable per MIL-STD-202, methode 208 guaranteed
- Polarity：Color band denotes cathode end
- Mounting position ： Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25℃ ambient temperature unless otherwise specified ,Single phase,half wave, 50HZ， resistive or inductive load。For capacitive load,derate by20％)

TYPE NUMBER	Symbols	1N5819	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	Volts
Maximum RMS voltage	V_{RMS}	28	Volts
Maximum DC blocking vlotage	V_{DC}	40	Volts
Maximum average forward rectified current 0.375″ (9.5mm) lead length at T_a=75℃	$I_{F(AV)}$	1.0	Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	25.0	Amps
Maximum instantaneous forward voltage at 1.0A	V_F	0.60	Volts
Maximum DC Reverse Current T_a=25℃	I_R	0.5	mA
at Rated DC Blocking Voltage T_a=100℃		10	
Typical junction capacitance (Note 1)	C_J	110	PF
Typical thermal resistance(Note 2)	$R_{\theta JA}$	50	℃/W
Operating junction temperature range	T_J	-65 to+125	℃
storage temperature range	T_{STG}	-65 to+125	℃

Notes:

1、Measurded at 1.0MHZ and applied reverse voltage of 4.0 volts D.C.

2、Thermal resistane from junction to ambient .375(9.5mm) lead length.

RATINGS AND CHARACTERISTIC CURVES 1N5819

FIG.1-FORWARD CURRENT DERATING CURVE

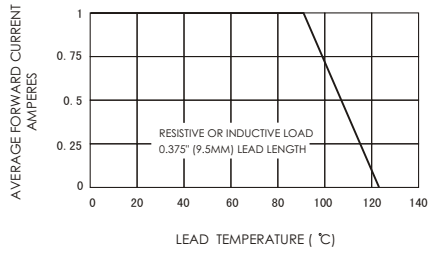


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

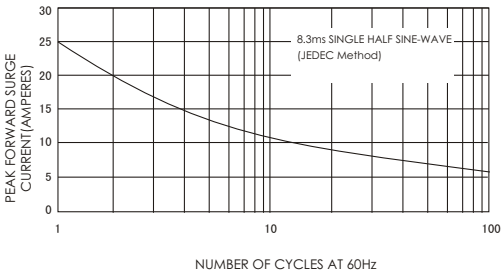


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

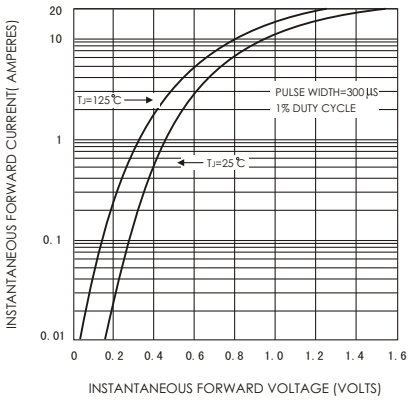


FIG.4-TYPICAL REVERSE CHARACTERISTICS

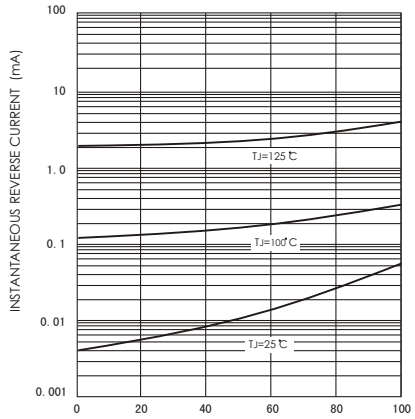


FIG.5-TYPICAL JUNCTION CAPACITANCE

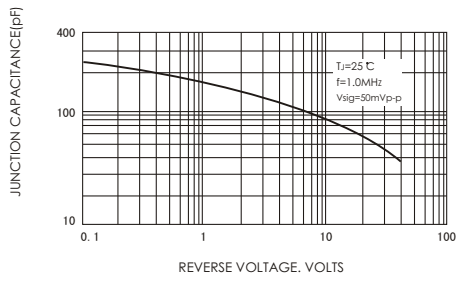


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE