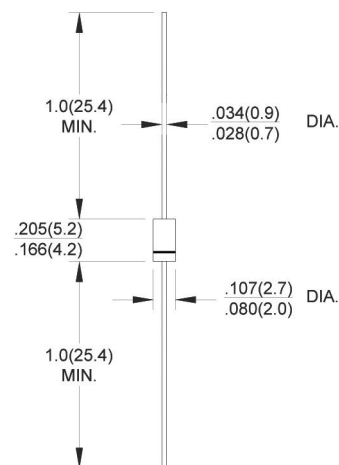


**Kingtronics®****1N5817 THRU  
1N5819****PLASTIC SCHOTTKY BARRIER RECTIFIER****VOLTAGE RANGE** 20 to 40 Volts**CURRENT** 1.0 Ampere**FEATURES**

Low switching noise  
 Low forward voltage drop  
 High forward surge capability  
 High reliability  
 High temperature soldering guaranteed  
 260°C/10 seconds, 0.375" (9.5mm) lead length at 5 lbs(2.3kg) tension

**MECHANICAL DATA**

**Case:** Transfer molded plastic  
**Epoxy:** UL94V-0 rate flame retardant  
**Polarity:** Color band denotes cathode end  
**Lead:** Plated axial lead, solderable per MIL-STD-202E method 208C  
**Mounting position:** Any  
**Weight:** 0.012ounce, 0.33 grams

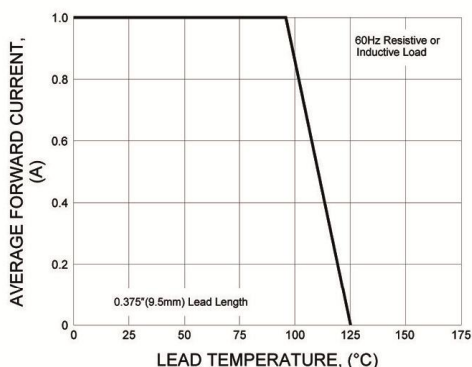
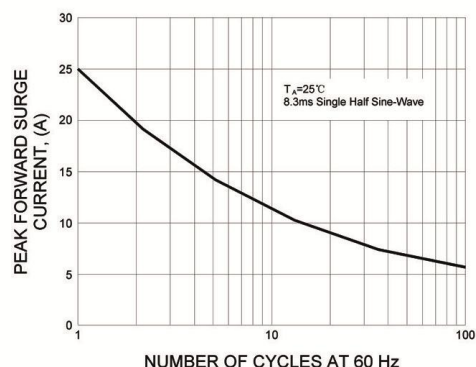
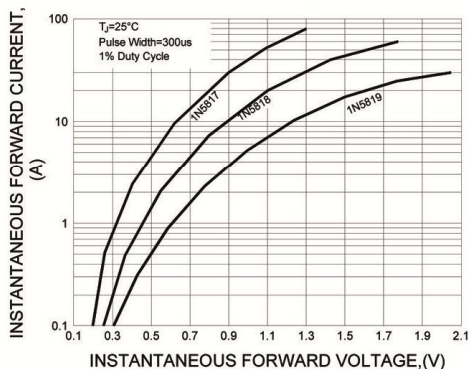
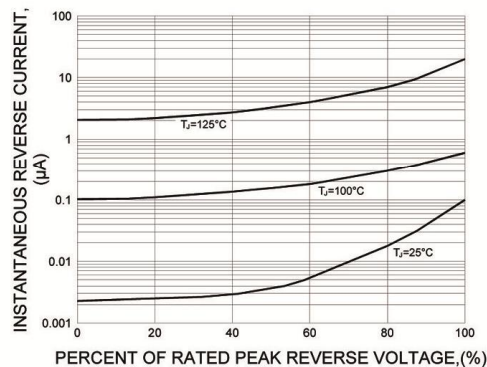
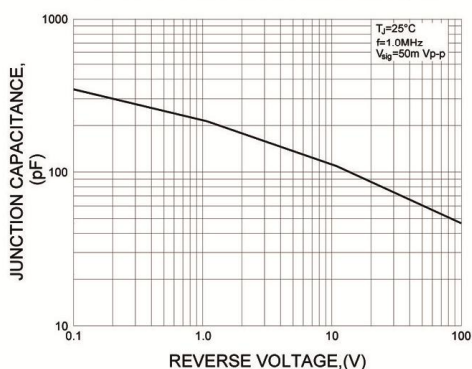
**DO-41****Dimensions in inches and (millimeters)****MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS****Ratings at 25°C ambient temperature unless otherwise specified ,****Single phase, half wave, 60Hz, resistive or inductive load.****For capacitive load derate current by 20%**

| PARAMETER                                                                                        |            | SYMBOL   | 1N5817      | 1N5818 | 1N5819 | UNIT  |
|--------------------------------------------------------------------------------------------------|------------|----------|-------------|--------|--------|-------|
| Maximum Repetitive Peak Reverse Voltage                                                          |            | VRRM     | 20          | 30     | 40     | Volts |
| Maximum RMS Voltage                                                                              |            | VRMS     | 14          | 21     | 28     | Volts |
| Maximum DC Blocking Voltage                                                                      |            | VDC      | 20          | 30     | 40     | Volts |
| Maximum Average Forward Rectified Current at TA=75°C                                             |            | I(AV)    | 1.0         |        |        | Amps  |
| Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC method) |            | IFSM     | 25          |        |        | Amps  |
| Maximum Instantaneous Forward Voltage at 1.0A                                                    |            | VF       | 0.45        | 0.55   | 0.60   | Volts |
| Maximum Instantaneous Forward Voltage at 3.0A                                                    |            |          | 0.75        | 0.875  | 0.90   | Volts |
| Maximum DC Reverse Current<br>at rated DC Blocking Voltage                                       | TA = 25°C  | IR       | 0.5         |        |        | mA    |
|                                                                                                  | TA = 125°C |          | 10          |        |        |       |
| Typical Junction Capacitance (NOTE 1)                                                            |            | CJ       | 110         |        |        | pF    |
| Typical Thermal Resistance (NOTE 2)                                                              |            | RθJA     | 80          |        |        | °C/W  |
| Operating and Storage Temperature Range                                                          |            | TJ, TSTG | -55 to +125 |        |        | °C    |

1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.

2. Thermal Resistance Junction to Ambient.

**Kingtronics® International Company**

**Kingtronics®****1N5817 THRU  
1N5819****RATINGS AND CHARACTERISTIC CURVES****FIG.1-TYPICAL 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**

Note: Specifications are subject to change without notice.

**Kingtronics® International Company**Website: [www.kingtronics.com](http://www.kingtronics.com)Email: [info@kingtronics.com](mailto:info@kingtronics.com)

Tel: (852) 8106 7033

Fax: (852) 8106 7099