

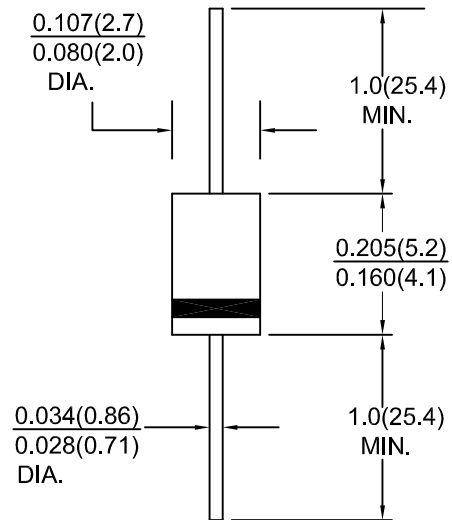
## FEATURES:

- Low power loss, high efficiency
- High surge current capability
- Low forward voltage drop
- For use in low voltage, high frequency inverters, free wheeling application

## MECHANICAL DATA

Case : Molded plastic use UL 94V-0 recognized flame Retardant epoxy  
 Terminals : Axial leads, solderable per MIL-STD-202 Method 208  
 Polarity : Color band on body denotes cathode end  
 Mounting Position : Any  
 Weight : 0.34 grams, 0.012 ounce

## DO-204AL(DO-41)



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temp. unless otherwise specified.

Single phase, half sine wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20 %.

Characteristic	Symbol	1N5817	1N5818	1N5819	Units
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	20	30	40	Volts
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	Volts
Maximum average forward rectified current at T <sub>L</sub> =90° C	I <sub>(AV)</sub>	1.0			Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I <sub>FSM</sub>	25			Amps
Maximum instantaneous forward voltage at 1.0 A (NOTE 1)	V <sub>F</sub>	0.50	0.55	0.60	Volts
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 1)	I <sub>R</sub>	1.0 10.0			mA
Typical thermal resistance	R <sub>th-JA</sub>	50			° C/W
	R <sub>th-JL</sub>	10			
Typical junction capacitance	C <sub>J</sub>	110.0			pF
Operating junction ,and storage temperature range	T <sub>j</sub> , T <sub>stg</sub>	-65 to +125			° C

NOTE :

1. Pulse test: 300 us pulse width, 1% duty cycle

# RATINGS AND CHARACTERISTIC CURVES 1N5817 THRU 1N5819

FIG.1-DERATIVE CURVE FOR OUTPUT RECTIFIER CURRENT

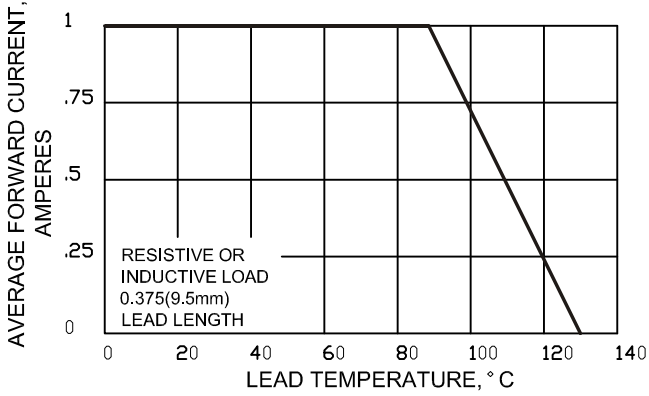


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

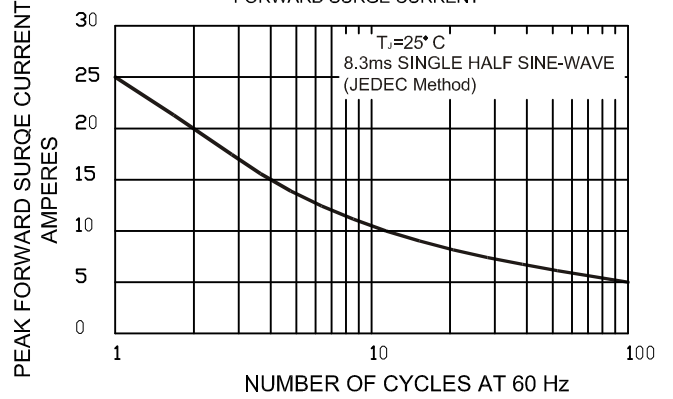


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

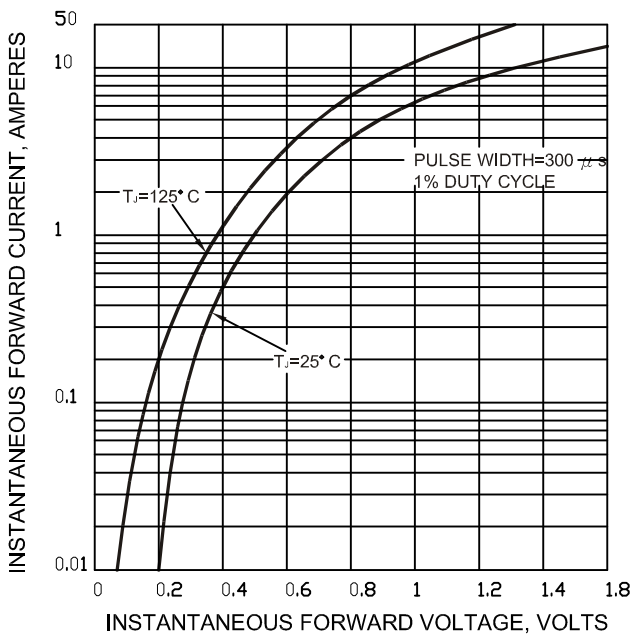


FIG.4-TYPICAL REVERSE CHARACTERISTICS

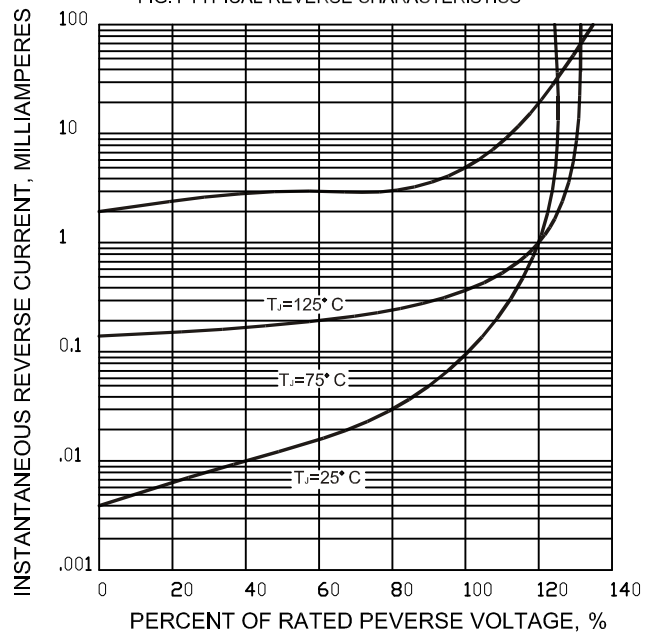


FIG.5-TYPICAL JUNCTION CAPACITANCE

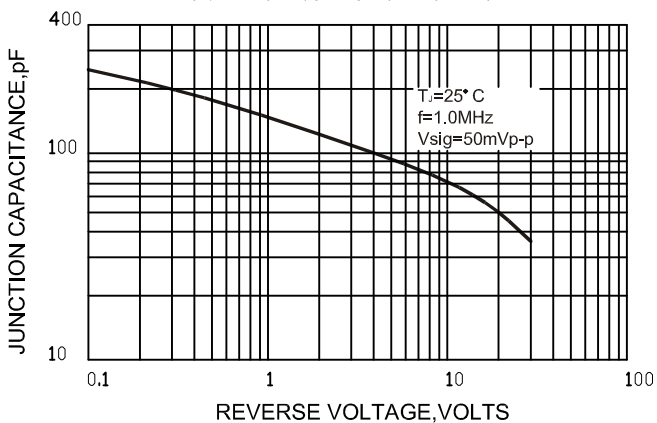


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

