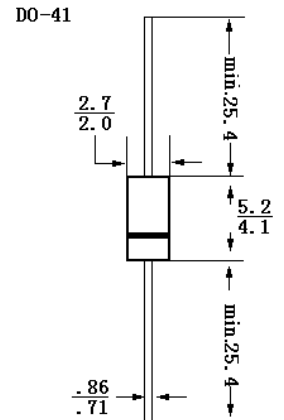


# 1N 5817 THRU 1N 5819

## SCHOTTKY BARRIER DIODES

### Features

- Metal silicon junction, majority carrier conduction
- Guarding for overvoltage protection
- Low power loss, high efficiency
- High current capability low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed; 250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3Kg) tension

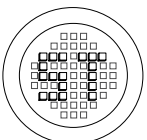


Dimensions in mm

### Absolute Maximum Ratings and Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

	Symbols	1N5817	1N5818	1N5819	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	Volts
Maximum RMS voltage	$V_{RMS}$	14	21	28	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	Volts
Maximum Non-repetitive Peak Reverse Voltage	$V_{RSM}$	24	36	48	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length At $T_L = 90^\circ\text{C}$	$I_{(AV)}$	1			Amps
Peak Forward Surge Current, 8.3ms Single half sine-wave Superimposed On Rated Load (JEDEC method) At $T_L = 70^\circ\text{C}$	$I_{FSM}$	25			Amps
Maximum Instantaneous Forward Voltage At 1 A	$V_F$	0.450	0.550	0.600	Volts
Maximum Instantaneous Forward Voltage At 3.1 A	$V_F$	0.750	0.875	0.900	Volts
Maximum Instantaneous Reverse Current at Rated DC Reverse Voltage	$I_R$	1			mAmps
		10			mAmps
Typical Thermal Resistance	$R_{\theta JA}$	50			$^\circ\text{C/W}$
	$R_{\theta JL}$	15			
Typical Junction Capacitance	$C_J$	110			pF
Storage and Operating Junction Temperature Range	$T_J, T_S$	-65 to +125			$^\circ\text{C}$



®

**РАДИОТЕХ-ТРЕЙД**

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Веб: www.rct.ru

# 1N 5817 THRU 1N 5819

## SCHOTTKY BARRIER DIODES

FIG.1-FORWARD CURRENT DERATING CURVE

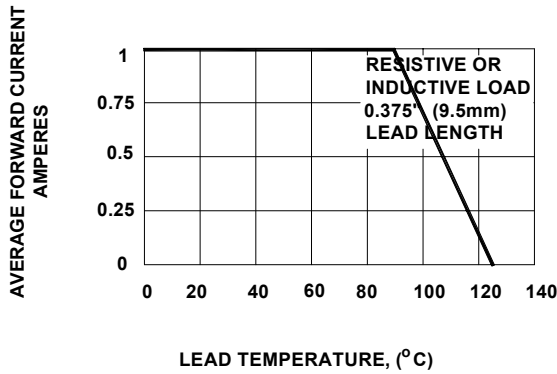


Fig.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

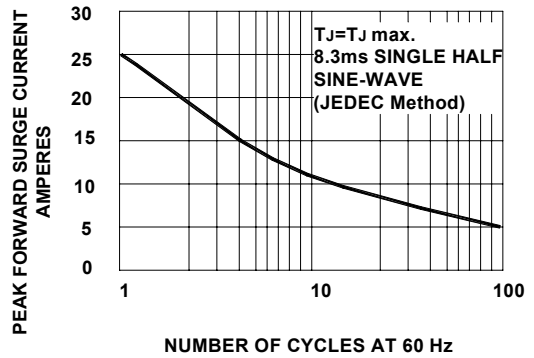


Fig.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

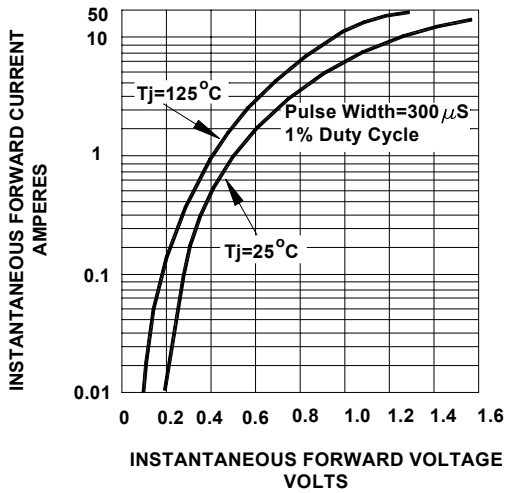


Fig.4- TYPICAL REVERSE CHARACTERISTICS

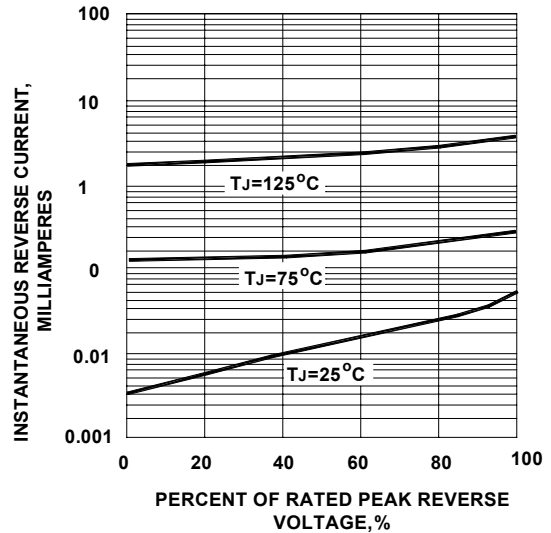


Fig.5- TYPICAL JUNCTION CAPACITANCE

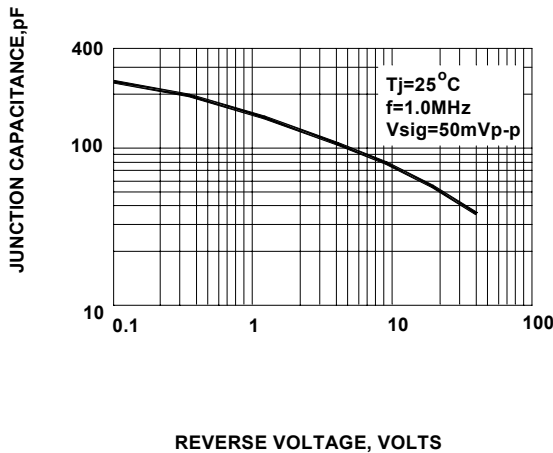
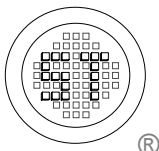
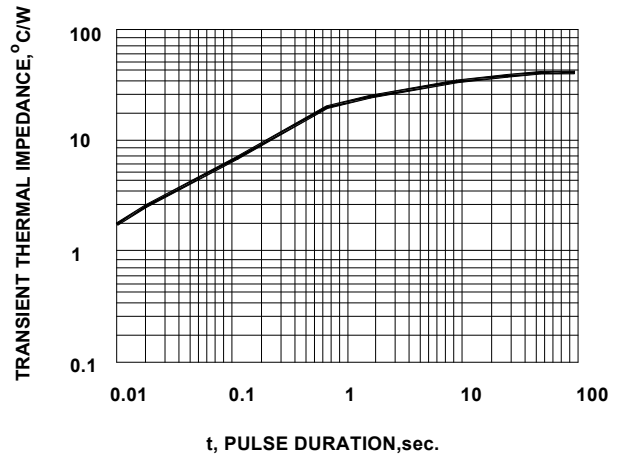


Fig.6- TYPICAL TRANSIENT THERMAL IMPEDANCE



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002  
Certificate No. 06103



ISO 14001  
Certificate No. 7116



ISO 9001 : 2000  
Certificate No. 056-199-01-002-1nd

Dated : 26/05/2005