



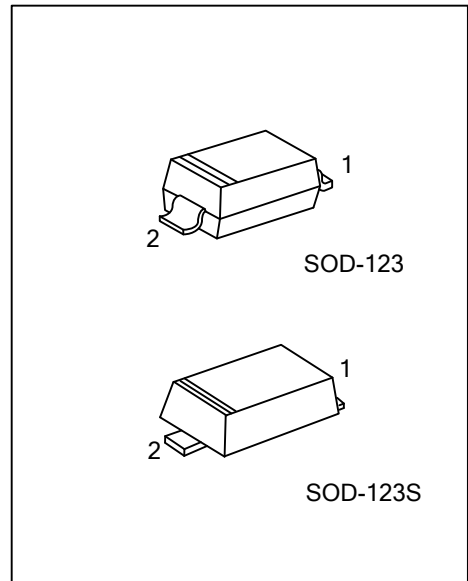
## 1N5819

DIODE

### SCHOTTKY BARRIER DIODE

#### ■ FEATURES

- \* Schottky barrier chip
- \* Low power loss, high efficiency.
- \* Low forward voltage drop.
- \* High surge current capability.
- \* For use in low voltage, high frequency inverters, free wheeling diode, and polarity protection applications.



#### ■ ORDERING INFORMATION

Ordering Number	Package	Pin Assignment		Packing
		1	2	
1N5819G-CA2-R	SOD-123	K	A	Tape Reel
1N5819G-CA2S-R	SOD-123S	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>1N5819G-CA2-R</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) R: Tape Reel (2) CA2: SOD-123, CA2S: SOD-123S (3) G: Halogen Free and Lead Free</p>
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#### ■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (Single Diode @T<sub>A</sub>=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	40	V
Maximum non-repetitive Peak Reverse Voltage	V <sub>RM</sub>	40	V
Maximum DC Blocking Voltage	V <sub>R</sub>	40	V
Working Peak Reverse Voltage	V <sub>RWM</sub>	40	V
Maximum RMS Reverse Voltage	V <sub>R(RMS)</sub>	28	V
Repetitive Peak Forward Current	I <sub>FRM</sub>	625	mA
Non-repetitive Peak Forward Surge Current 8.3ms Single Half-Sine-Wave	I <sub>FSM</sub>	25	A
Average Forward Rectified Output Current	I <sub>OUT</sub>	1	A
Power Dissipation	P <sub>D</sub>	250	mW
Storage Temperature	T <sub>STG</sub>	-65~+150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.  
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

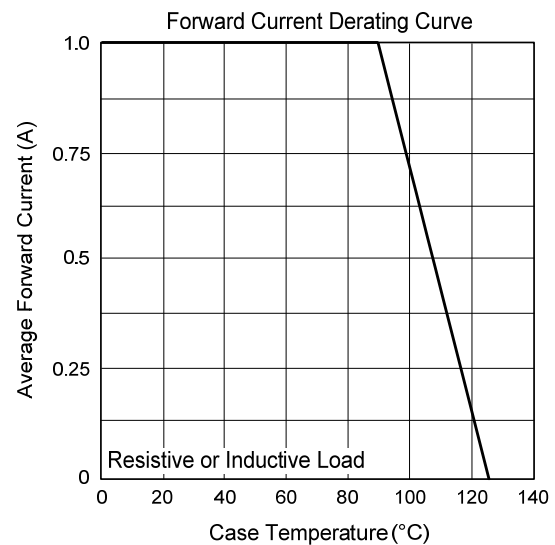
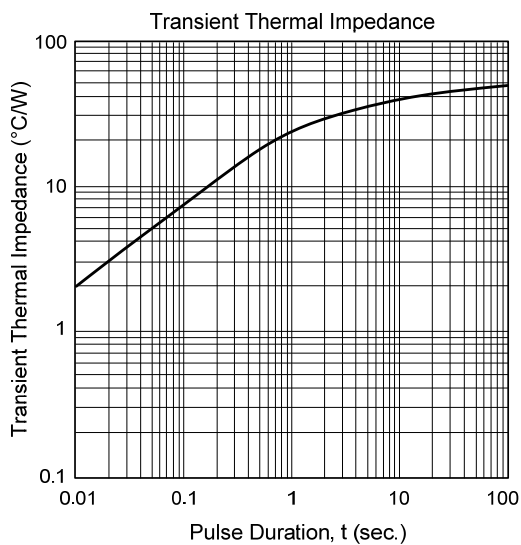
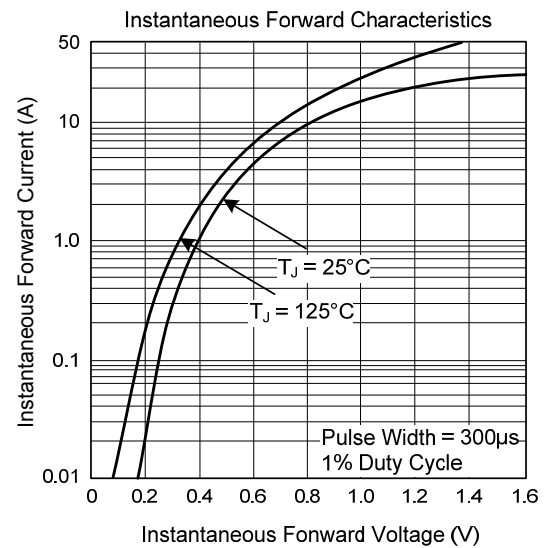
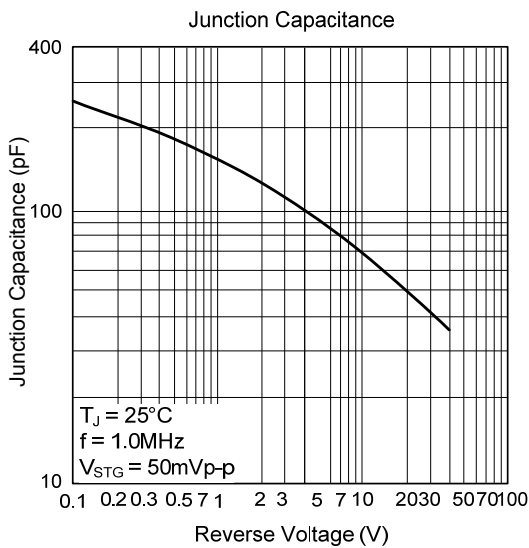
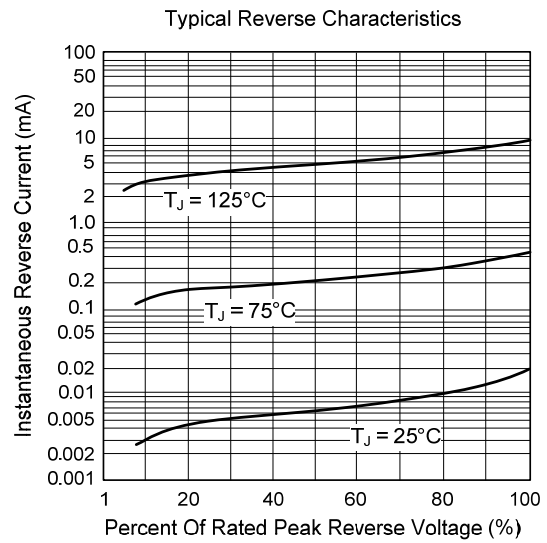
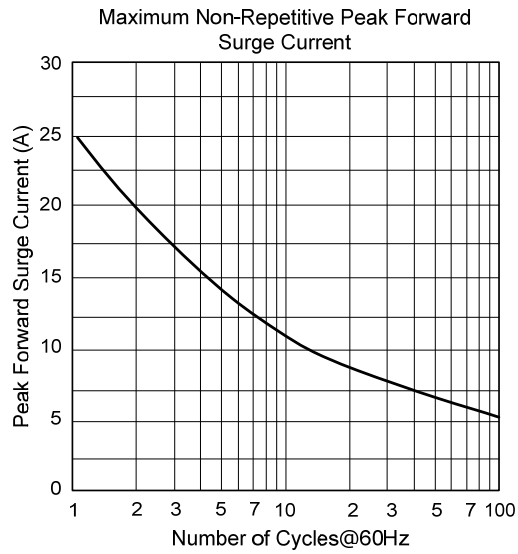
■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ <sub>JA</sub>	500	°C/W

■ ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =1A			0.6	V
		I <sub>F</sub> =3A			0.9	V
Reverse Breakdown Voltage	BV <sub>R</sub>	I <sub>R</sub> = 1mA	40			V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =40V			1	mA
Diode Capacitance	C <sub>D</sub>	V <sub>R</sub> =4V, f=1MHz			120	pF

## TYPICAL CHARACTERISTICS



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