



## SOD-323 Plastic-Encapsulate Diodes

1N5819 SCHOTTKY DIODES

### FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Reverse Capacitance

MARKING: 1N5819 S4



### Maximum Ratings and Electrical Characteristics, Single Diode @T<sub>A</sub>=25°C

Parameter	Symbol	SD103AWS	SD103BWS	SD103CWS	Unit
Peak Repetitive Peak reverse voltage	V <sub>RRM</sub>				
Working Peak DC Blocking Voltage	V <sub>RWM</sub>	40	30	20	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	28	21	14	V
Forward Continuous Current	I <sub>FM</sub>	350			mA
Repetitive Peak Forward Current @t≤1.0s	I <sub>FRM</sub>	1.5			A
Power Dissipation	P <sub>d</sub>	200			mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	300			°C/W
Storage temperature	T <sub>STG</sub>	-65~+125			°C

### Electrical Ratings @T<sub>A</sub>=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	40			V	IR=10μA
SD103AWS		30				IR=10μA
SD103BWS		20				IR=10μA
Forward voltage	V <sub>F</sub>			0.37 0.60	V	I <sub>F</sub> =20mA I <sub>F</sub> =200mA
Reverse current	I <sub>RM</sub>			5.0		μA
SD103AWS						
SD103BWS						
Capacitance between terminals	C <sub>T</sub>		50		pF	V <sub>R</sub> =0V,f=1.0MHz
Reverse Recovery Time	t <sub>rr</sub>		10		ns	I <sub>F</sub> =I <sub>R</sub> =200mA I <sub>rr</sub> =0.1I <sub>R</sub> ,R <sub>L</sub> =100Ω



## Typical Characteristics

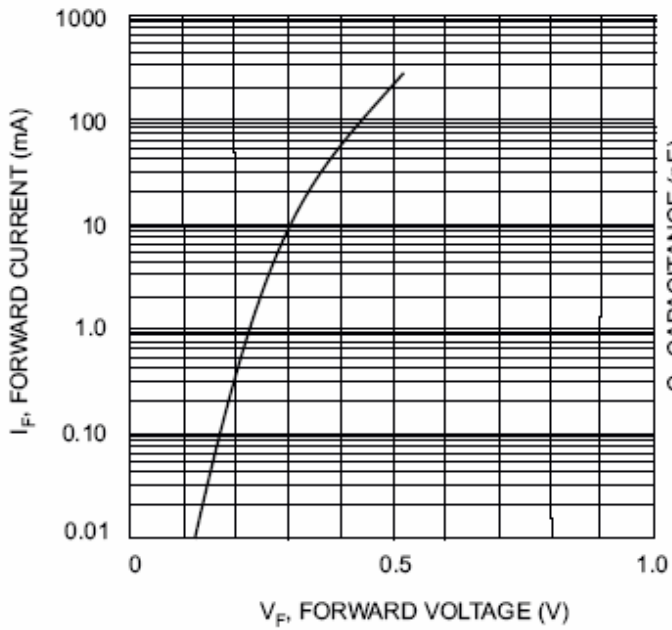


Fig. 1 Typical Forward Characteristics

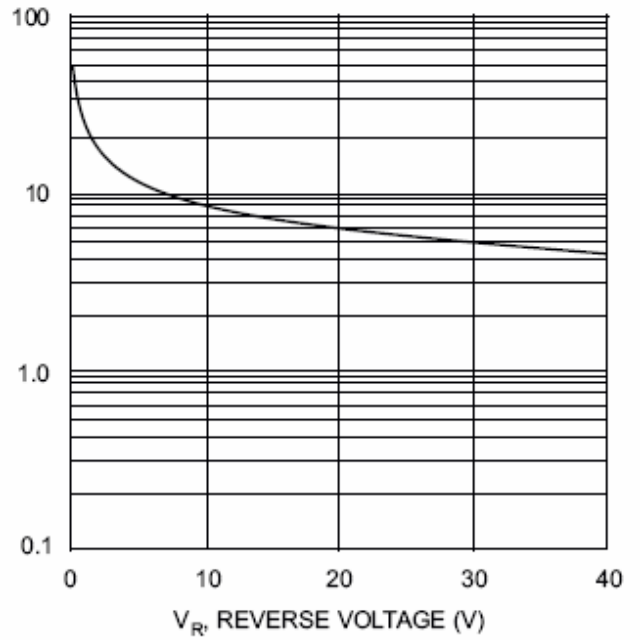


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage