

1N5819WT

DATASHEET

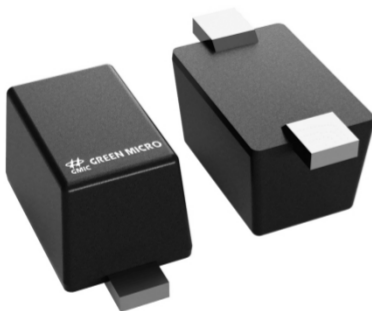
Specification Revision History:

Version	Date	Description
V1.0	2021/06	New
V1.1	2023/05	Modify Ordering Information
V1.2	2024/02	Modify Ordering Information
V1.3	2025/05	Add application precautions and overall typesetting.

FEATURES

- ※ Schottky Barrier Rectifiers
- ※ Low Forward Voltage Drop
- ※ Fast Switching Time
- ※ Surface Mount Package Ideally Suited for Automated Insertion
- ※ Lead, Halogen and Antimony Free, RoHS Compliant "Green" Device

TOP VIEW AND PINNING



1、Cathode

2、Anode

SOD-523

ORDERING INFORMATION

Product Model	Package Type	Packing	Packing Qty
1N5819WT(GMIC)	SOD-523	REEL	3000PCS/REEL
1N5819WT	SOD-523	REEL	3000PCS/REEL

MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Working Peak Reverse Voltage	V_{RWM}	40	V
DC Blocking Voltage	V_R	40	V
Forward Current	I_F	200	mA
Non-Repetitive Peak Forward Surge Current at t=8.3ms	I_{FSM}	0.5	A
Power Dissipation	P_D	200	mW
Operating Temperature Range	T_J	-55 to 125	°C
Storage Temperature Range	T_{stg}	-55 to 150	°C

ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Breakdown Voltage	V_{BR}	$I_R=100\mu A$	40			V
Forward Voltage	V_{F1}	$I_F=1mA$		0.27		V
	V_{F2}	$I_F=5mA$		0.32		
	V_{F3}	$I_F=20mA$			0.37	
	V_{F4}	$I_F=200mA$			0.6	
Reverse Leakage Current	I_R	$V_R=30V$			5	μA
Junction Capacitance	C_j	$V_R=0V, f=1MHz$			28	pF

TYPICAL PERFORMANCE CHARACTERISTICS

Fig.1 Power Derating Curve

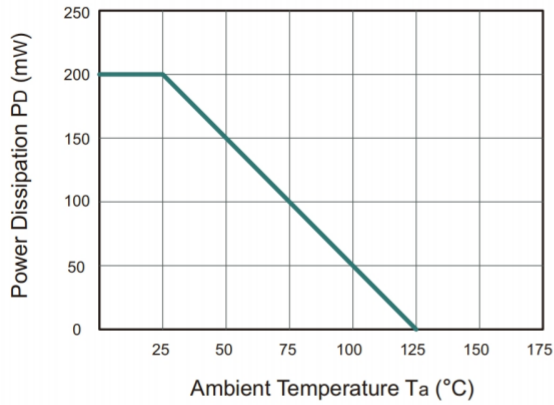


Fig.2 Typical Instantaneous Reverse Characteristics

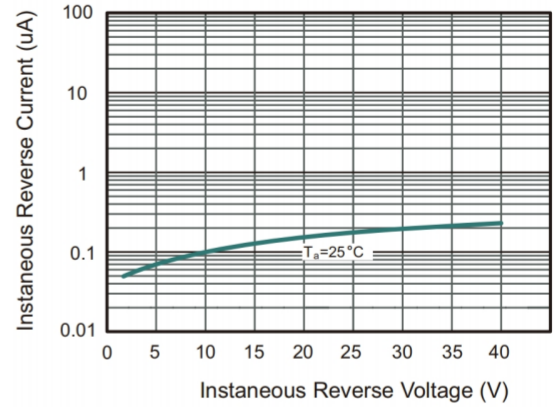


Fig.3 Typical Forward Characteristic

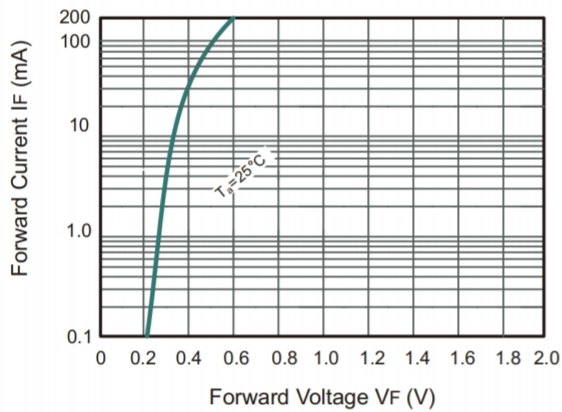
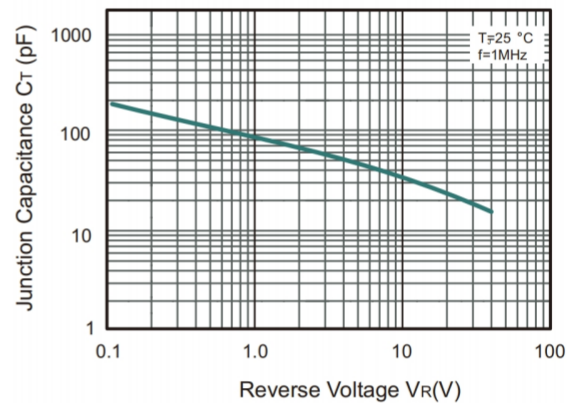
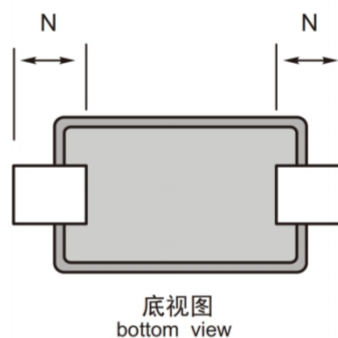
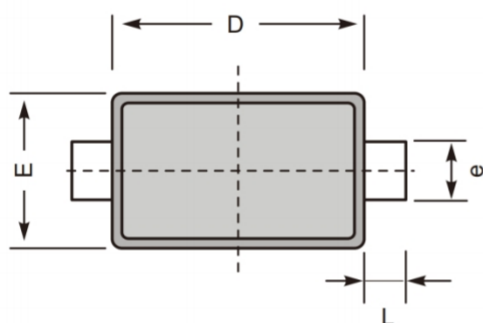
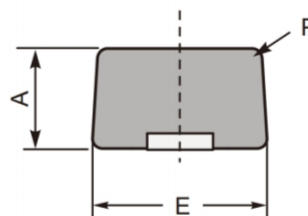
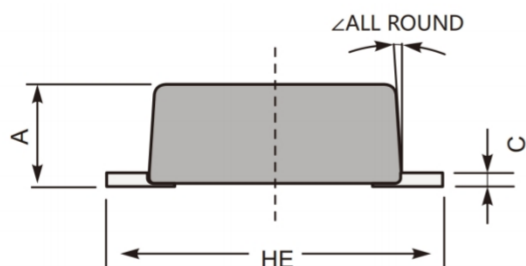


Fig.4 Typical Junction Capacitance



OUTLINE DIMENSIONS

SOD-523



Symbol	Dimensions In Millimeters		Dimensions In Mil	
	Min	Max	Min	Max
A	0.51	0.77	20	30
e	0.25	0.35	10	14
C	0.08	0.15	3	6
D	1.10	1.30	43	51
E	0.75	0.99	30	39
HE	1.50	1.70	59	67
N	0.35 ref		14 ref	
L	0.2 ref		8.0 ref	
P	R0.1 ALL ROUND		R4.0 ALL ROUND	
∠	10°±1°			

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