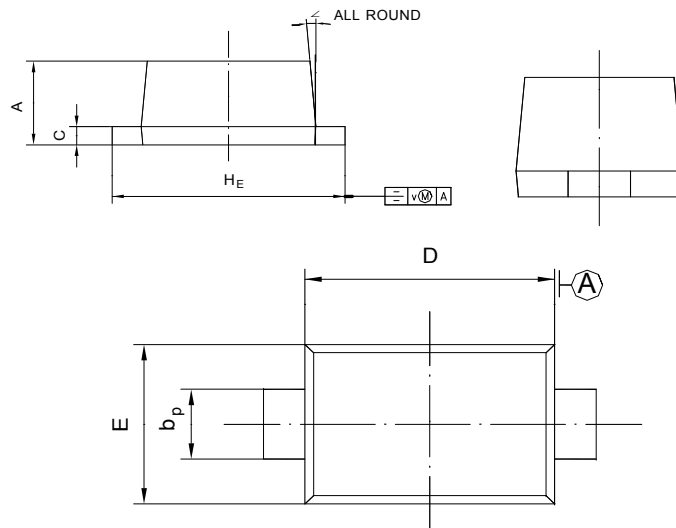


FEATURES

- 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

MECHANICAL DATA

- Case: SOD-523
- Terminals: Solderable per MIL-STD-750, Method 2026



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70 0.50	0.40 0.20	0.14 0.05	1.30 1.10	0.90 0.75	1.70 1.50	0.1	5°

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	40	V
Reverse Voltage	V _R	40	V
Average Forward Rectified Current	I _{F(AV)}	350	mA
Non-repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	2	A
Power Dissipation	P _{tot}	200	mW
Operating and Storage Temperature Range	T _j , T _{stg}	- 65 to + 125	°C

1N5819WT

Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 10\mu\text{A}$	$V_{(BR)R}$	40	- - -	- - -	V
Reverse Leakage Current at $V_R = 30\text{V}$	I_R	- -	- -	5	μA
Forward Voltage at $I_F = 20\text{ mA}$ at $I_F = 200\text{ mA}$	V_F	- -	- -	0.37 0.6	V
Total Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_T	-	50	-	pF
Reverse Recovery Time at $I_F = I_R = 200\text{ mA}$, $I_{rr} = 0.1 I_R$, $R_L = 100\text{ }\Omega$	t_{rr}	-	10	-	ns

RATING AND CHARACTERISTIC CURVES (1N5819WT)

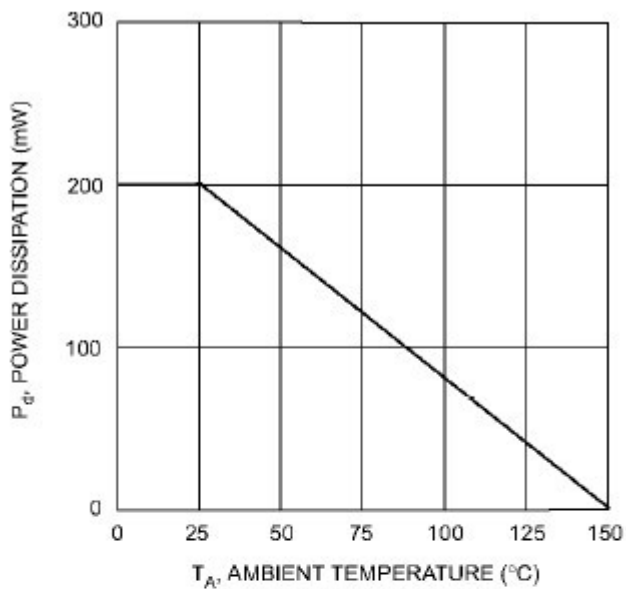


Fig. 1 Power Derating Curve

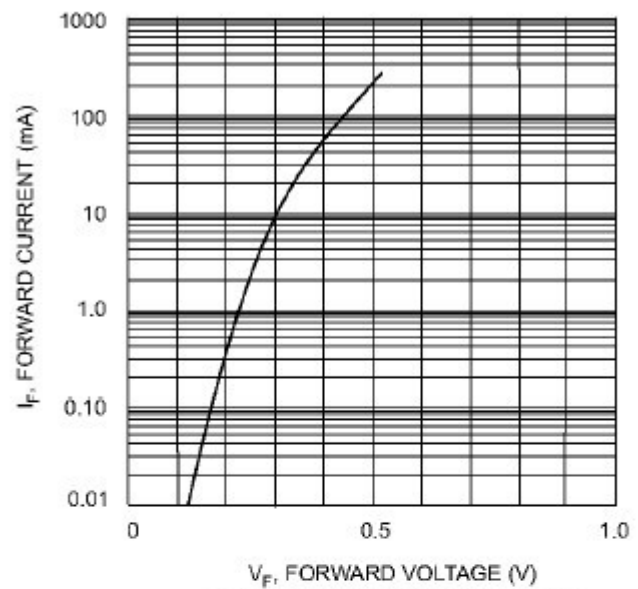


Fig. 2 Typical Forward Characteristics

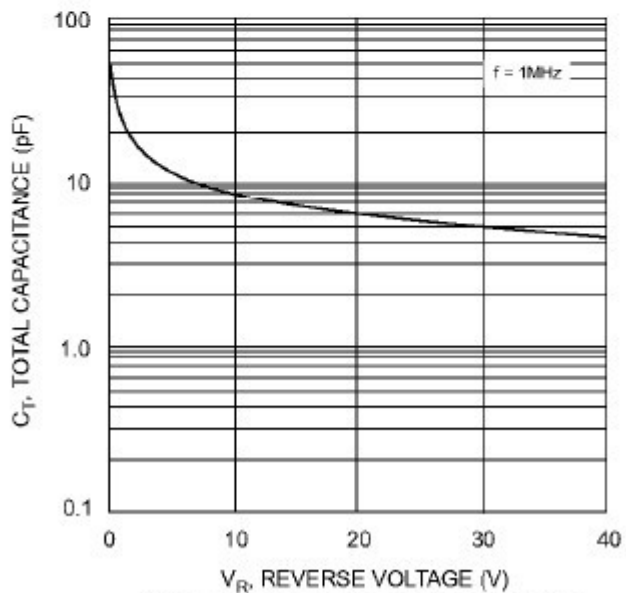


Fig. 3 Total Capacitance vs Reverse Voltage