



1SS319 SCHOTTKY BARRIER DIODE

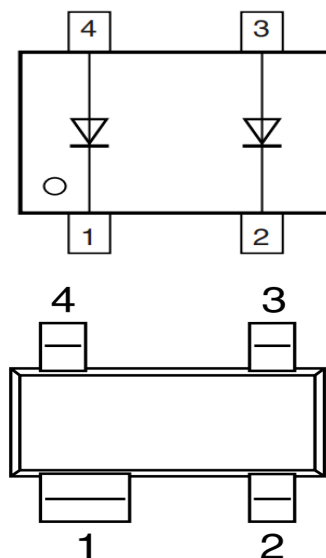
Features

- Low forward voltage

Applications

- Ultra high-speed switching
- Voltage clamping
- Protection circuits

Marking Code: "A4"



SOT-143

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	40	V
Forward Current	I_F	100	mA
Repetitive Peak Forward Current	I_{FRM}	300	mA
Peak Forward Surge Current ($t_p = 10\text{ ms}$)	I_{FSM}	600	mA
Power Dissipation	P_D	150	mW
Thermal Resistance from Junction Ambient	R_{thJA}	500	K/W
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 30\text{ mA}$ at $I_F = 100\text{ mA}$	V_F	320 400 500 600	mV
Reverse Current at $V_R = 40\text{ V}$	I_R	5	μA
Total Capacitance at $V_R = 1\text{ V}$, $f = 1\text{ MHz}$	C_T	25	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $I_R = 10\text{ mA}$, $R_L = 100\text{ }\Omega$	t_{rr}	6	ns

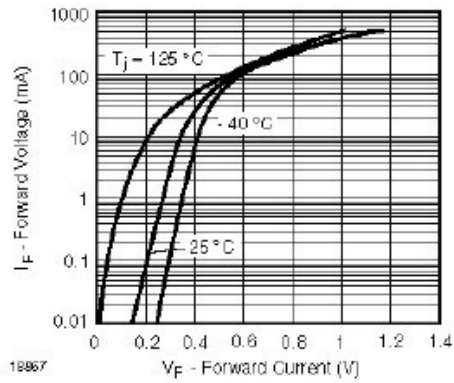


Figure 1. Typical Forward Voltage Forward Current at Various Temperatures

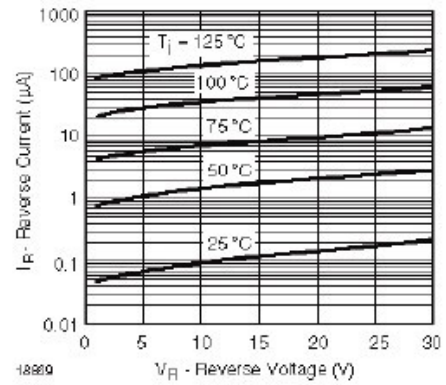


Figure 3. Typical Variation of Reverse Current at Various Temperatures

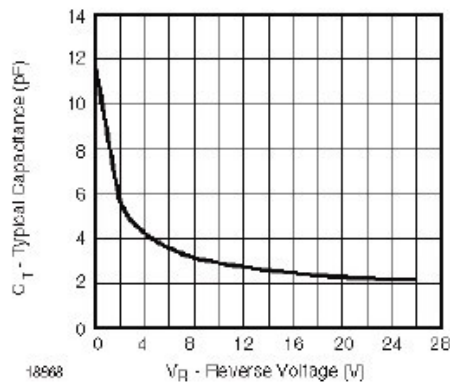


Figure 2. Typical Capacitance C_T vs. Reverse Applied Voltage V_R



Package Outline

Plastic surface mounted package

SOT-143

