

UHF MIXER
SILICON EPITAXIAL SCHOTTKY BARRIER DIODE

DESCRIPTION AND APPLICATIONS

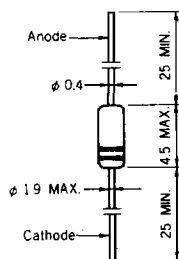
The 1SS97 is silicon epitaxial schottky barrier diode, especially designed for mixing, switching, log or A-D converting, frequency discriminating sampling and wave shaping.

FEATURES

- Small size glass package. (DO-35 TYPE)
- High breakdown voltage: $V_R = 10 \text{ V MIN.}$ at $I_R = 10 \mu\text{A}$
- Batch matched.
- Low cost.

PACKAGE DIMENSIONS
in millimeters

JEDEC : DO-35



Color Code (from cathode)
Green, Blue

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

Reverse Voltage	V_R	10	V
Forward Current	I_F	35	mA
DC Power Dissipation	P_d	150	mW
Junction Temperature	T_j	+175	$^\circ\text{C}$
Storage Temperature	T_{stg}	-65 to +175	$^\circ\text{C}$
Reverse Burnout *	B_o	2.0	erg

Note * : Capacitor charge method C(charge) = 25 pF

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Reverse Voltage	V_R	10			V	$I_R = 10 \mu\text{A}$
Forward Voltage	V_F	0.46		0.55	V	$I_F = 10 \text{ mA}$
Delta Forward Voltage *	ΔV_F			10	mV	$I_F = 10 \text{ mA}$
Capacitance	C_t			1.0	pF	$V_R = 0, f = 1.0 \text{ MHz}$
Delta Capacitance *	ΔC_t			0.2	pF	$V_R = 0, f = 1.0 \text{ MHz}$

Note * : Difference of V_F, C_t .

TYPICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)