

SILICON DETECTOR & MIXER DIODE

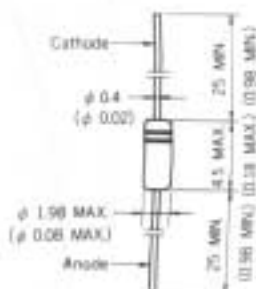
1SS99

DESCRIPTION The 1SS99 is silicon epitaxial schottky barrier diode, especially designed for mixing, log or A-D converting, video detecting, frequency discriminating, sampling and wave shaping.

FEATURES

- Small size glass package. (DO-35 TYPE)
- Low noise figure.
- Low turn-on voltage.
 $V_F=0.23$ V MAX. at $I_F=1$ mA
- Low capacitance.
 $C_1=0.9$ pF MAX. at 1 MHz, $V_R=0.2$ V
- Low cost.

PACKAGE DIMENSIONS
in millimeters (inches)



Color Code (from cathode)
Black, Blue

ABSOLUTE MAXIMUM RATINGS

Maximum Temperatures

Junction Temperature	T_j	175	°C
Storage Temperature	T_{stg}	-65 to +175	°C

Maximum Power Dissipation ($T_a=25$ °C)

Power Dissipation	P_T	150	mW
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Maximum Voltage and Current ($T_a=25$ °C)

Peak Reverse Voltage	V_{RM}	5.0	V
Forward Current	I_F	30	mA
Reverse Burnout*	B_D	2.0	erg

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

ELECTRICAL CHARACTERISTICS ($T_a = 25$ °C)

SYMBOL	CHARACTERISTIC	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
I_R	Reverse Current			25	μ A	$V_R=0.5$ V
V_F	Forward Voltage			0.23	V	$I_F=1.0$ mA
I_F	Forward Current	30			mA	$V_F=0.5$ V
C_1	Capacitance			0.9	pF	$V_R=0.2$ V, $f=1$ MHz

TYPICAL CHARACTERISTICS (Ta=25 °C)

