

# 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**

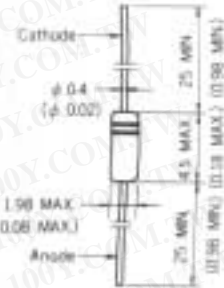
- Small size glass package. (DO-35 TYPE)
- Low noise figure.
- Low turn-on voltage.  
 $V_F=0.23$  V MAX. at  $I_F=1$  mA
- Low capacitance.  
 $C_1=0.9$  pF MAX. at 1 MHz,  $V_R=0.2$  V
- Low cost.

**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
Maximum Voltage and Current ( $T_a=25$ °C)		
Peak Reverse Voltage	$V_{RM}$	5.0 V
Forward Current	$I_F$	30 mA
Reverse Burnout*	$B_o$	2.0 erg

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

**PACKAGE DIMENSIONS**  
in millimeters (inches)



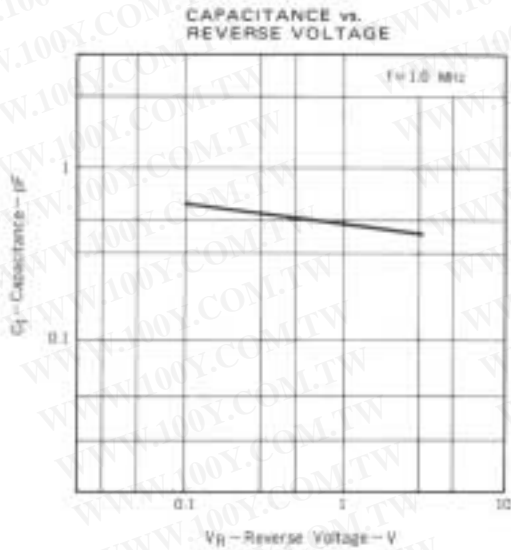
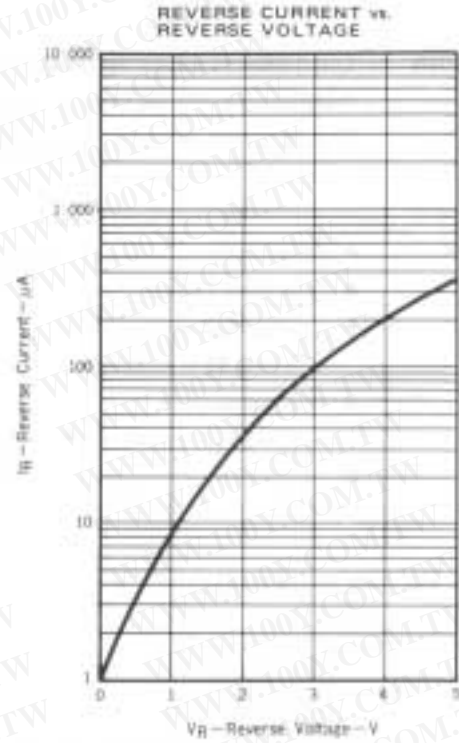
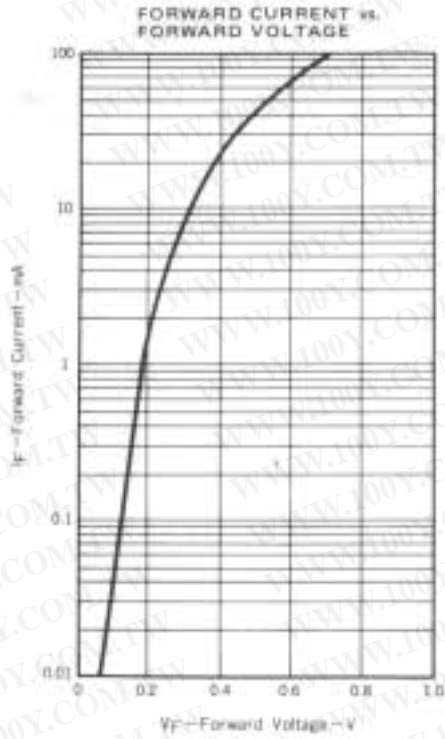
Color Code (from cathode)  
Black, Blue

**ELECTRICAL CHARACTERISTICS ( $T_a = 25$  °C)**

SYMBOL	CHARACTERISTIC	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
$I_R$	Reverse Current			25	$\mu$ 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

勝特力材料 886-3-5753170  
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 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

TYPICAL CHARACTERISTICS (Ta=25 °C)



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