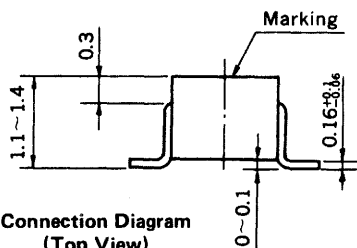
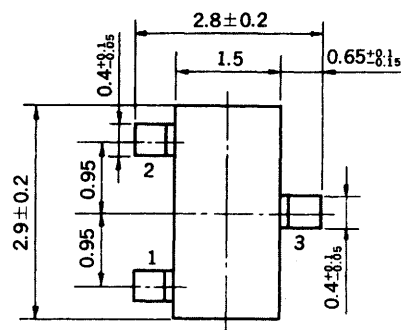
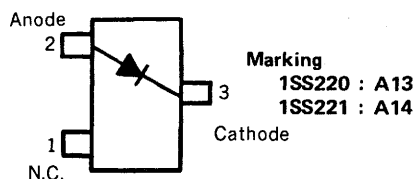


HIGH SPEED SWITCHING  
SILICON EPITAXIAL DIODES  
MINI MOLD

PACKAGE DIMENSIONS  
in millimeters



Connection Diagram  
(Top View)



FEATURES

- Low capacitance:  $C_t = 4.0 \text{ pF MAX.}$
- High speed switching:  $t_{rr} = 3.0 \text{ ns MAX.}$
- Wide applications including switching, limiter, clipper.

ABSOLUTE MAXIMUM RATINGS

Maximum Voltages and Currents ( $T_a = 25 \text{ }^\circ\text{C}$ )

		1SS220	1SS221	
Peak Reverse Voltage	$V_{RM}$	70	100	V
DC Reverse Voltage	$V_R$	70	100	V
Peak Forward Current	$I_{FM}$	300	300	mA
Average Rectified Current	$I_O$	100	100	mA
DC Forward Current	$I_F$	100	100	mA

Maximum Temperatures

Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to +150	$^\circ\text{C}$

Thermal Resistance

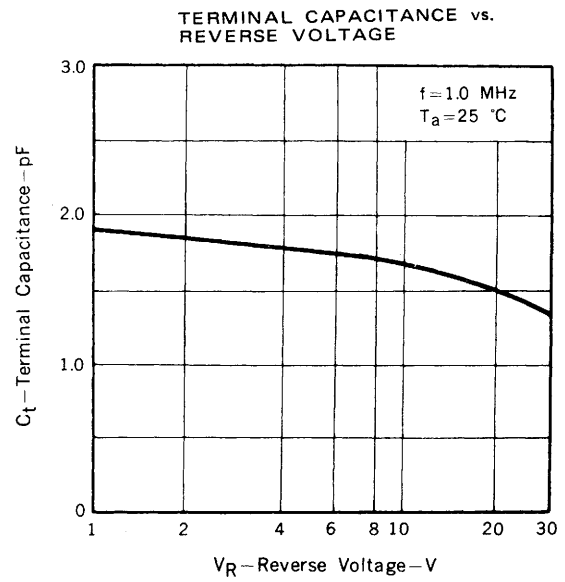
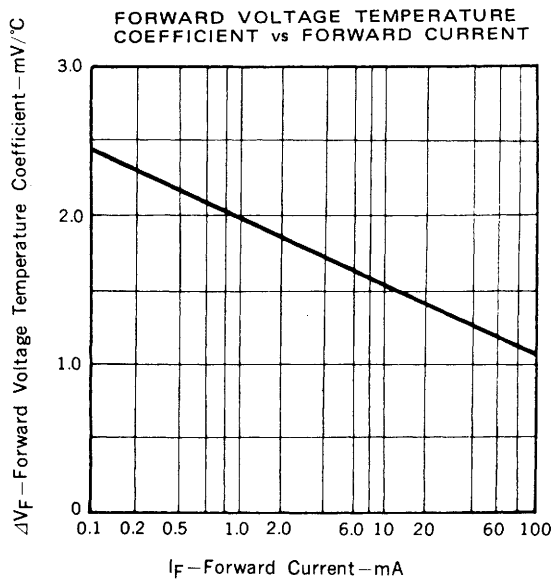
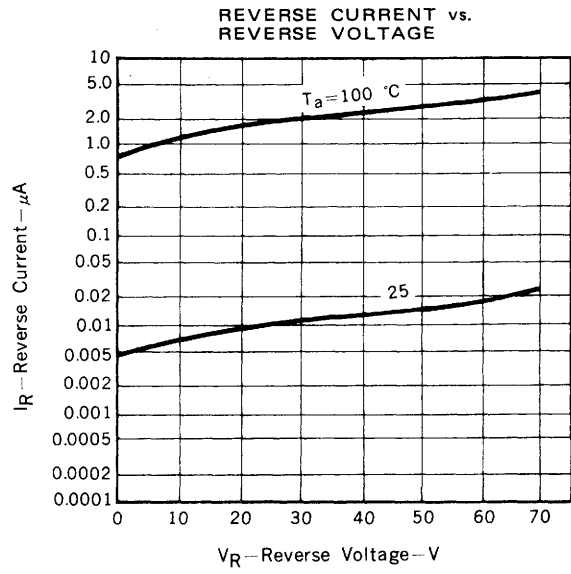
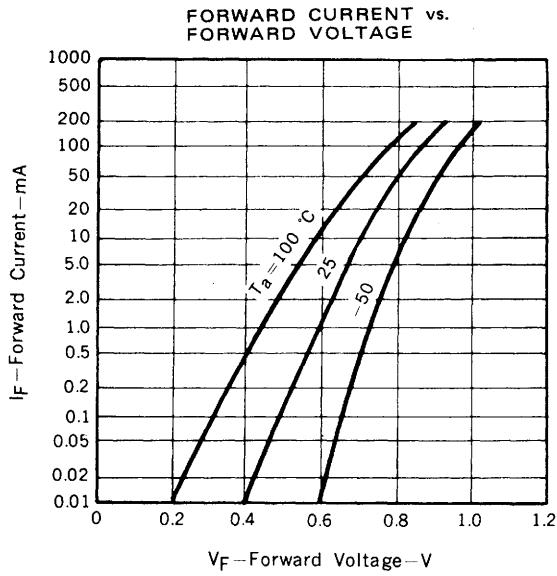
Junction to Ambient	$R_{th(j-a)}$	0.67	$^\circ\text{C/mW}$
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ELECTRICAL CHARACTERISTICS ( $T_a = 25 \text{ }^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Forward Voltage	$V_{F1}$		720	850	mV	$I_F = 10 \text{ mA}$
	$V_{F2}$		850	1000	mV	$I_F = 50 \text{ mA}$
	$V_{F3}$		950	1200	mV	$I_F = 100 \text{ mA}$
Reverse Current	$I_R$	1SS220		1.0	$\mu\text{A}$	$V_R = 70 \text{ V}$
		1SS221		1.0	$\mu\text{A}$	$V_R = 100 \text{ V}$
Capacitance	$C_t$		2.0	4.0	pF	$V_R = 0, f = 1.0 \text{ MHz}$
Reverse Recovery Time	$t_{rr}$			3.0	ns	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}, R_L = 100 \text{ } \Omega, \text{ See Test Circuit.}$

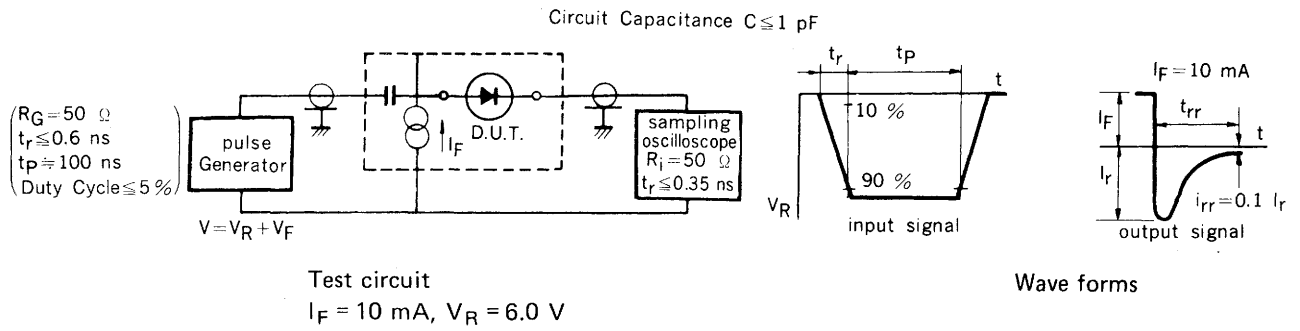
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TYPICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )



SWITCHING CHARACTERISTICS TEST CIRCUIT

Reverse recovery time :  $t_{rr}$



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