

No.1186D

DSB-0-15

Silicon Epitaxial Planar Type

High-Speed Switching Diode

#### **Features**

- · Ideally suited for use in hybrid ICs because of small-sized package
- · Fast switching speed

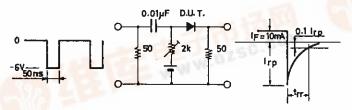
Absolute Maximum Ratings at		unit		
Peak Reverse Voltage	$V_{RM}$		<b>-75</b>	V
Reverse Voltage	$V_{R}$		-50	V
Surge Current	$I_{FSM}$	(1µsec)	4	Α
Average Rectified Current	$I_{\mathbf{O}}$	-	150	mA
Peak Forward Current	$I_{FM}$		300	mA
Junction Temperature	$\mathrm{Tj}$		125	°C
Storage Temperature	Tstg		-55  to  + 125	°C

## Electrical Characteristics at Ta = 25°C

-20 C		HIII	ιур	max	unit
$V_{\mathbf{F}}$	$I_F = 10 \text{mA}$		0.75	1.0	V
	$I_F = 50 \text{mA}$		0.85	1.0	V
	$I_F = 100 \text{mA}$			1.2	V
$I_R$	$V_R = -50V$			-100	nA
c	$V_R = 0V, f = 1MHz$			7	рF
$t_{rr}$	$I_F = 10 \text{mA}, V_R = -6 \text{V}$			5	ns
	$R_{L} = 50\Omega, I_{rr} = 0.1I_{rp}$			20	MHz
	V <sub>F</sub>	$\begin{array}{ccc} V_{F} & I_{F}\!=\!10mA \\ I_{F}\!=\!50mA \\ I_{F}\!=\!100mA \\ I_{R} & V_{R}\!=\!-50V \\ c & V_{R}\!=\!0V,\!f\!=\!1MHz \\ t_{rr} & I_{F}\!=\!10mA,\!V_{R}\!=\!-6V \end{array}$	$V_{F} \qquad I_{F} = 10 m A \\ I_{F} = 50 m A \\ I_{F} = 100 m A \\ I_{R} \qquad V_{R} = -50 V \\ c \qquad V_{R} = 0 V, f = 1 M H z \\ t_{rr} \qquad I_{F} = 10 m A, V_{R} = -6 V$	$\begin{array}{cccc} V_F & I_F = 10 mA & 0.75 \\ I_F = 50 mA & 0.85 \\ I_F = 100 mA & 0.85 \\ I_R & V_R = -50 V \\ c & V_R = 0 V, f = 1 MHz \\ t_{rr} & I_F = 10 mA, V_R = -6 V \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

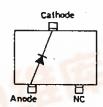
Marking: A2

### Reverse Recovery Time Test Circuit

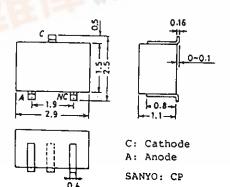


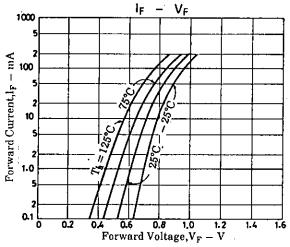
Unit (capacitance: F)

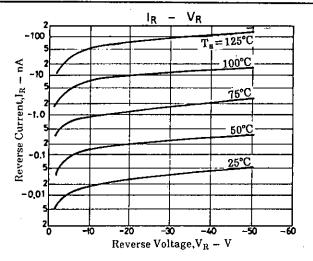
#### **Electrical Connection**

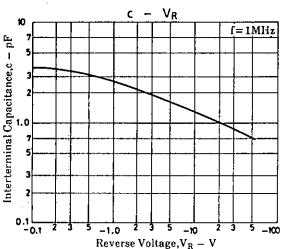


# Package Dimensions 1148 (unit: mm)









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