



ON Semiconductor®

**ON Semiconductor**  
**DATA SHEET****1SV316** — Silicon Epitaxial Pin Diode  
**Variabe Resistance Attenuator Use****Features**

- Ultrasmall-sized package facilitates high-density mounting and permits 1SV316-applied equipment to be made smaller
- Small interterminal capacitance ( $C=0.23\text{pF}$  typ)

**Specifications**Absolute Maximum Ratings at  $T_a=25^\circ\text{C}$ 

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	$V_R$		50	V
Forward Current	$I_F$		50	mA
Allowable Power Dissipation	P		150	mW
Junction Temperature	$T_j$		125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +125	$^\circ\text{C}$

Electrical Characteristics at  $T_a=25^\circ\text{C}$ 

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=10\mu\text{A}$	50			V
Reverse Current	$I_R$	$V_R=50\text{V}$			0.1	$\mu\text{A}$
Forward Voltage	$V_F$	$I_F=50\text{mA}$		0.95	1.0	V
Interterminal Capacitance	C	$V_R=50\text{V}$ , $f=1\text{MHz}$		0.23		pF
Series Resistance	$r_s$	$I_F=10\mu\text{A}$ , $f=100\text{MHz}$		2400		$\Omega$
		$I_F=10\text{mA}$ , $f=100\text{MHz}$	4	6	9	$\Omega$

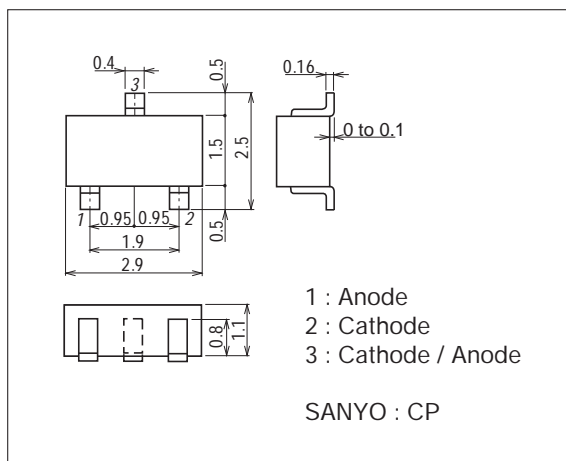
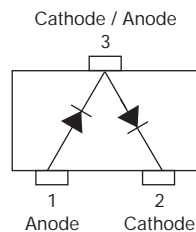
Note ) The specifications shown above are for each individual diode

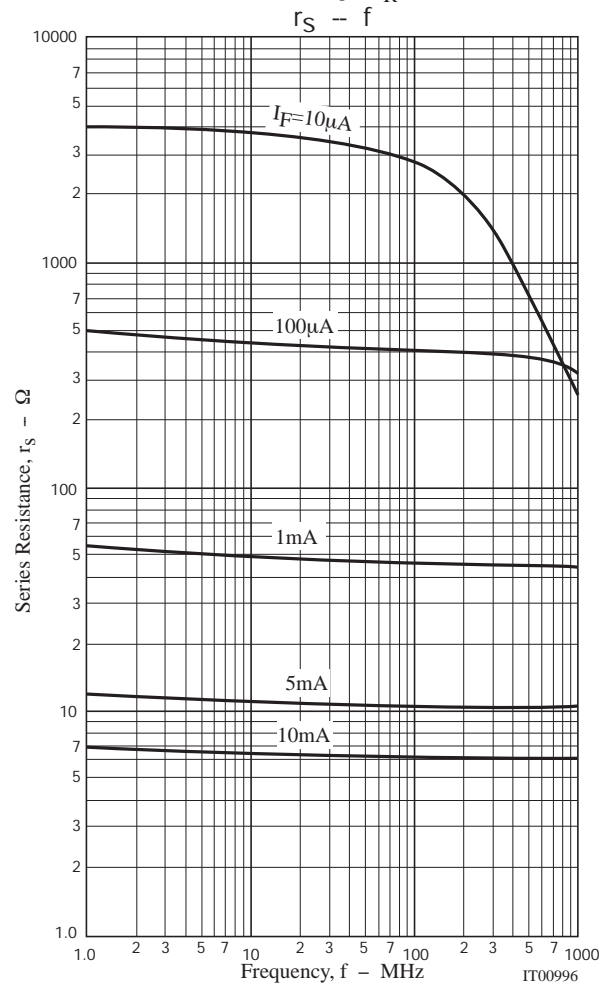
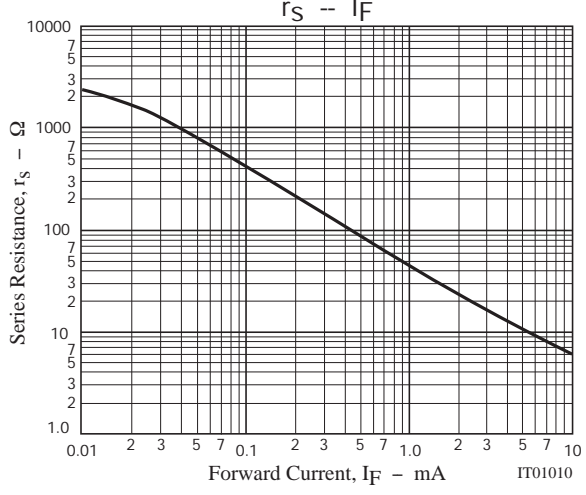
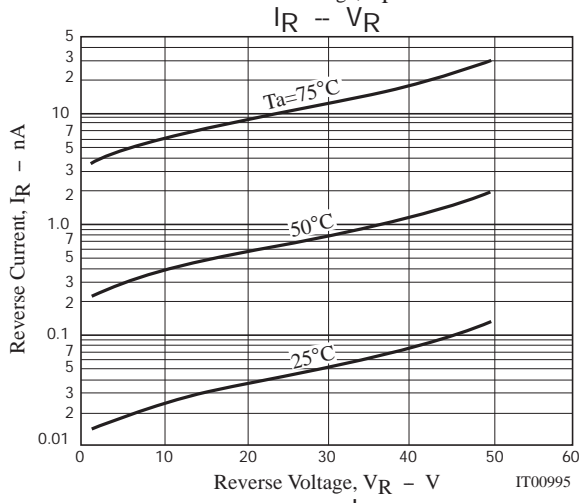
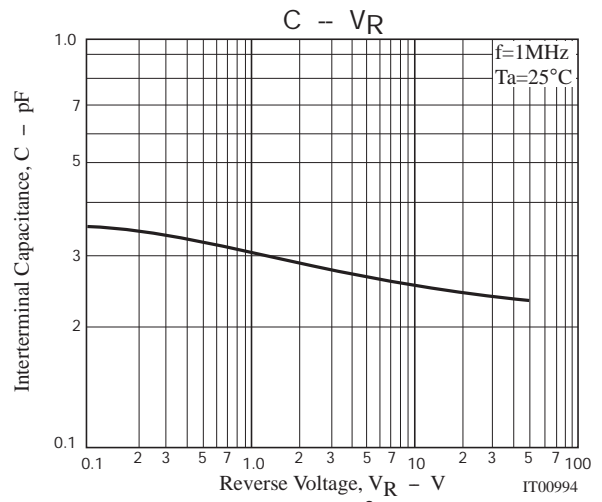
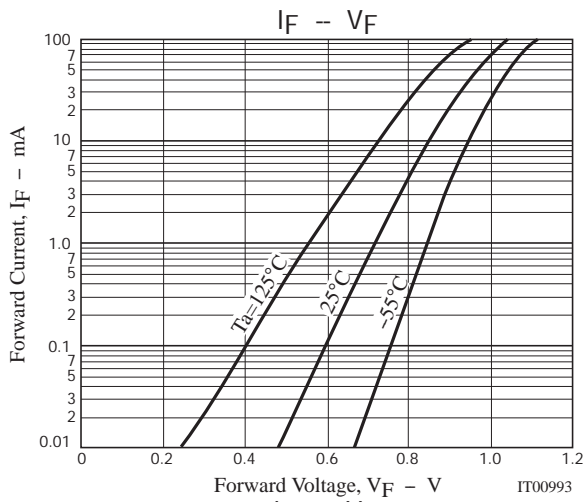
Marking : UV

**Package Dimensions**

unit : mm (typ)

1251A

**Electrical Connection**



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