

# Small Signal Diode

#### **Features**

· RoHS compliant package

#### **Mechanical Data**

· Case: SOT-23 Molded plastic

• Epoxy: UL94V-O rate flame retardant

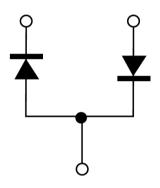
### **Packing & Order Information**

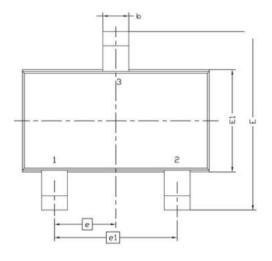
3,000/Reel

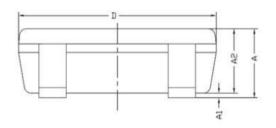


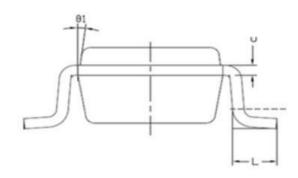
RoHS COMPLIANT

Graphic symbol









Symbol	MILLIMETERS		
	MIN	MAX	
Α	0.8	1.2	
A1	0	0.1	
A2	0.7	1.1	
b	0.3	0.5	
С	0.1	0.2	
D	2.7	3.1	
E	2.6	3	
E1	1.4	1.8	
е	0.95 BSC		
e1	1.9 BSC		
L	0.3	0.6	
θ1	7° NOM		



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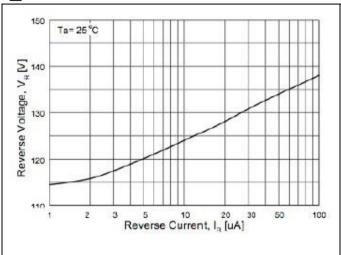
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum Ratings (T <sub>A</sub> =25°C unless otherwise specified)					
Symbol	Parameter	MIN	MAX	Unit	
PD(Ta=25°C)	Power dissipation		225	mW	
IF	Forward Current		200	mA	
VR	Reverse Voltage VR		80	V	
T <sub>J</sub> /T <sub>STG</sub>	Junction and Storage Temperature		-55 to +150	°C	
V(BR)	Reverse Breakdown Voltage(IR=100uA)	70		V	
IR	Reverse Leakage Current(VR=200V)		0.5	uA	
VF	Forward Voltage(Test Condition)				
	IF=1 mA		715		
	IF=10mA		855	mV	
	IF=50mA		1000		
	IF=150mA		1250		
CD	Diode Capacitance (VR=0V, f=1MHz)		1.5	pF	
Trr	Reverse Recovery Time		6	nS	



## Small Signal Diode

#### Characteristics Curve



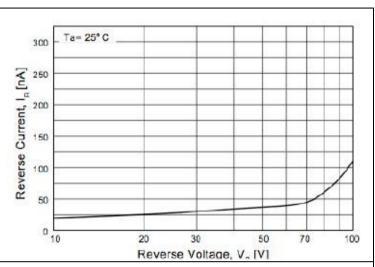


FIG.1-REVERSE VOLTAGE VS REVERSE CURRENT BV -1.0 TO 100 uA

Ta= 25°C

450

About 1 2 3 5 10 20 30 50 100

Forward Current. I. [uA]

FIG.2-REVERSE CURRENT VS REVERSE VOLTAGE IR-10 TO 100 V

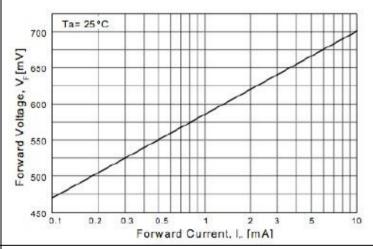


FIG.3- FORWARD VOLTAGE VS FORWARD CURRENT VF-1.0 TO 100 uA

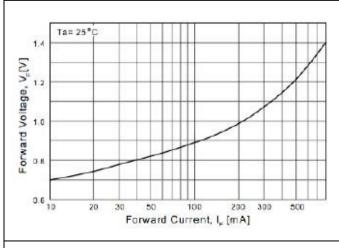


FIG.4-FORWARD VOLTAGE VS FORWARD CURRENT VF-0.1 TO  $10~\mathrm{mA}$ 

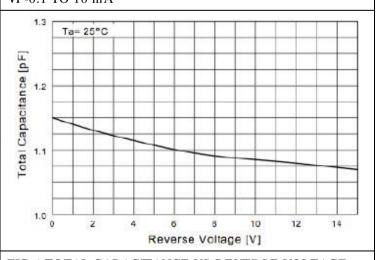


FIG.5- FORWARD VOLTAGE VS FORWARD CURRENT VF-10-800 mA

FIG.6-TOTAL CAPACITANCE VS REVERSE VOLTAGE



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