LITE-ON SEMICONDUCTORS

SD106WS

SURFACE MOUNT
SCHOTTKY BARRIER DIODE

REVERSE VOLTAGE – 30 Volts
FORWARD CURRENT – 0.2 Ampere

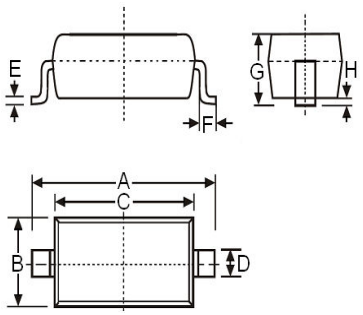
FEATURES

- Low turn-on voltage
- Guard Ring Construction for Transient protection
- IIdeal for protection of MOS devices, steering,biasing, and coupling diodes for fast switching and low logic level applications.

MECHANICAL DATA

- Case: SOD-323 Plastic
- Case Material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Moisture Sensitivity: Level 1 per J-STD-020D
- Lead Free in RoHS 2002/95/EC Compliant

SOD-323



SOD-323		
Dim.	Min.	Max.
A	2.50	2.70
B	1.20	1.40
C	1.60	1.80
D	0.25	0.35
E	0.08	0.15
F	0.25	0.40
G	---	1.0
H	0.00	0.10
Dimensions in millimeter		

Maximum Ratings & Thermal Characteristics @ T_A = 25℃ unless otherwise specified

Characteristic	Symbol	SD106WS	Units
Non-Repetitive Peak reverse voltage	V_{RM}	30	V
Forward Current	I_{FM}	200	mA
Forward Surge Current @t=10ms	I_{FSM}	1	A
Power Dissipation	P_D	250	mW
Thermal Resistance Junction to Ambient	$R_{\Theta JA}$	500	℃/W
Operating Temperature Range	T_J	150	℃
Storage Temperature Range	T_{STG}	-65~+150	℃

Electrical Characteristics @ T_A = 25℃ unless otherwise specified

Characteristic	Test Condition	Symbol	SD106WS	Unit
Reverse Breakdown Voltage	I_R = 100uA	V_{BR}	30	V
Maximum Forward Voltage	I_F = 200mA	V_F	550	mV
Maximum DC Reverse Current at Rated DC Blocking Voltage	V_R = 30V	I_R	5	uA
Typical Diode Capacitance	V_R =10V,f=1MHz	C_D	15	pF

REV. 1, Oct-2010, KSHR58

RATING AND CHARACTERISTIC CURVES
SD106WS

FIG.1- TYPICAL FORWORD CHARACTERISTICS

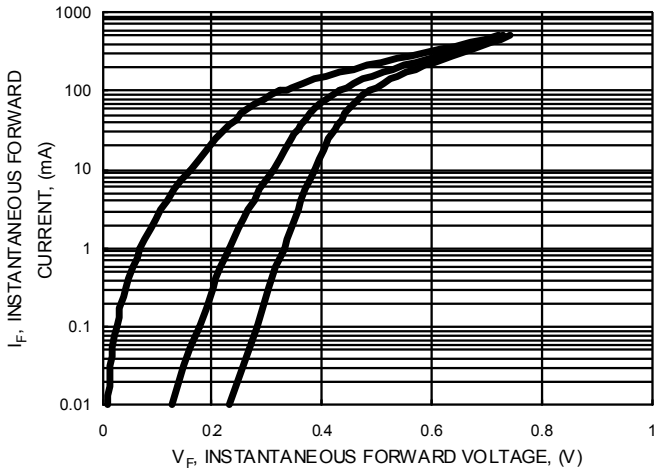


FIG.3- TYPICAL REVERSE CHARACTERISTICS

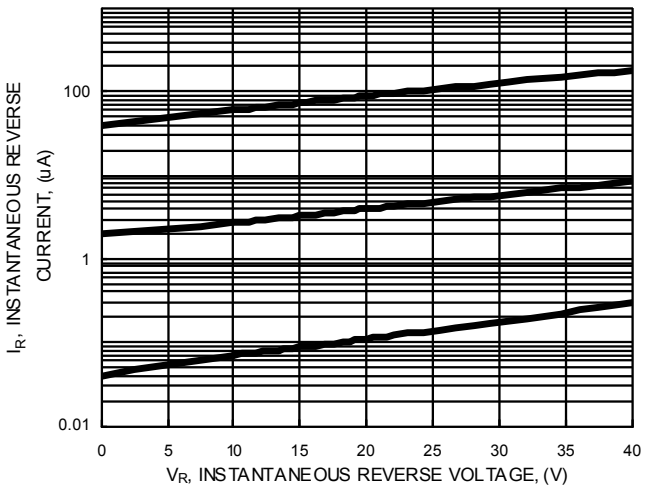
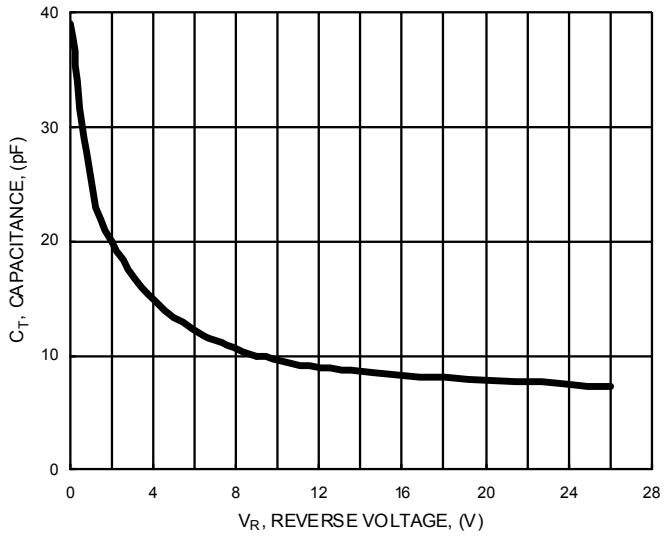


FIG.3- TYPICAL JUNCTION CAPACITANCE



Device Marking :

Device P/N	Marking	Equivalent Circuit Diagram
SD106WS	S21	1 ○—▶|—○ 2

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