GOOD-ARK
SEMICONDUCTOR

GS1N5711W
Schottky Barrier Diode

Features

- Fast switching speed
- Low forward voltage
- Low Capacitance
- Guard ring construction for transient protection

SOD-123

Mechanical Data

- Case: SOD-123
- Terminals: Solderable per MIL-STD-202, Method 208

Schematic Diagram

Maximum Ratings (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	70	V
Working Peak Reverse Voltage	V_{RWM}	70	V
DC Reverse Voltage	V_R	70	V
RMS Reverse Voltage	$V_{R(RMS)}$	49	V
Forward Continuous Current	I_F	15	mA
Power Dissipation	Pd	400	mW
Thermal Resistance Junction to Ambient[1]	$R_{\theta JA}$	250	°C/W
Operating Junction Temperature Range	T_J	125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

Note1 : Part mounted on FR-4 board with recommended pad layout

Electrical Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	MAX	UNIT
Reverse Breakdown Voltage	$V_{(BR)R}$	I_R=10μA	70	-	V
Forward voltage	V_F	I_F=1mA	-	0.41	V
		I_F=15mA		1.00	
Reverse Voltage Leakage Current	I_R	V_R=50V	-	200	nA
Total Capacitance	C_T	V_R=0V, f=1.0MHz	-	2	pF
Reverse Recovery Time	t_{rr}	I_F=I_R=10mA, I_{rr}=0.1*I_R, R_L=100Ω	-	1	ns

Typical Characteristic Curves(T_A = 25°C unless otherwise noted)

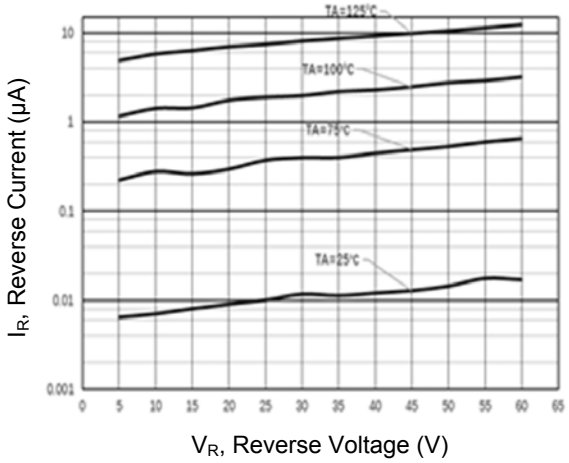


Figure 1. Typical Reverse Characteristic

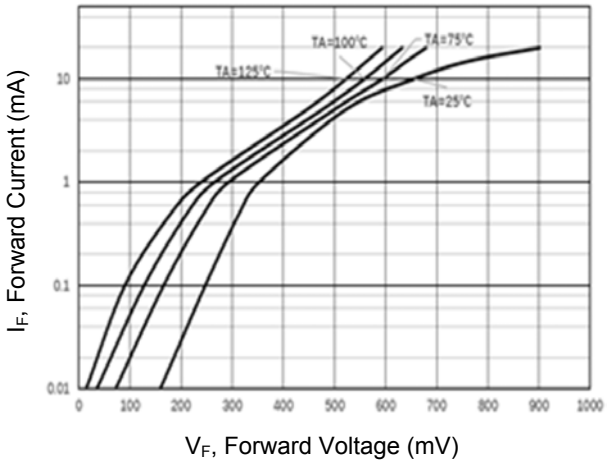


Figure 2. Typical Forward Characteristic

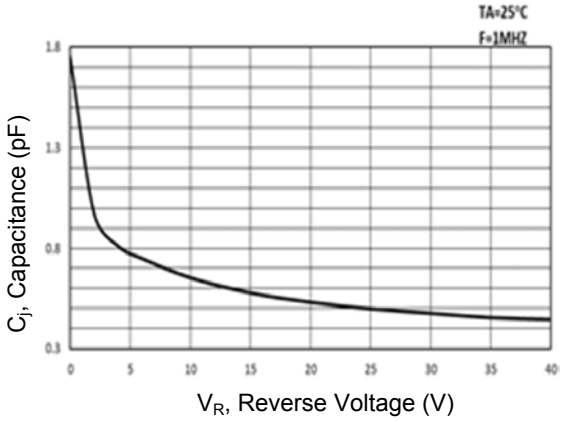


Figure 3. Capacitance vs. Reverse Voltage

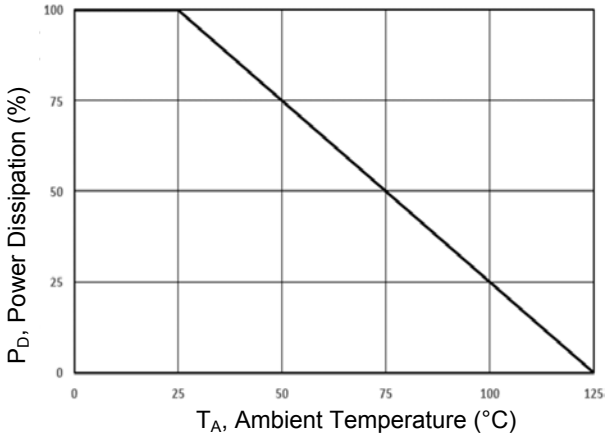
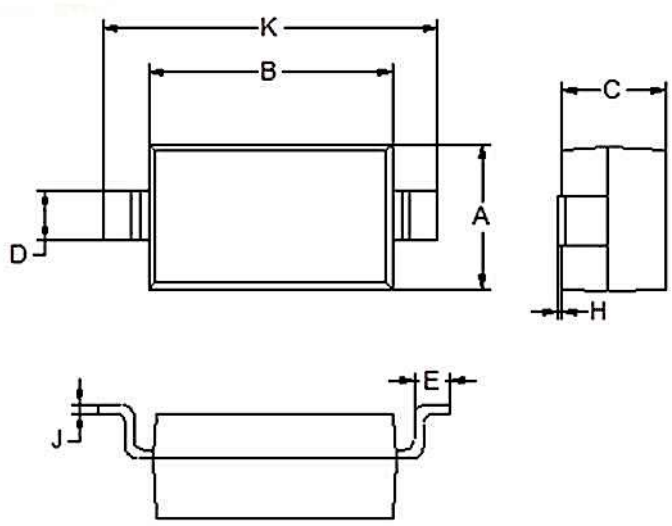


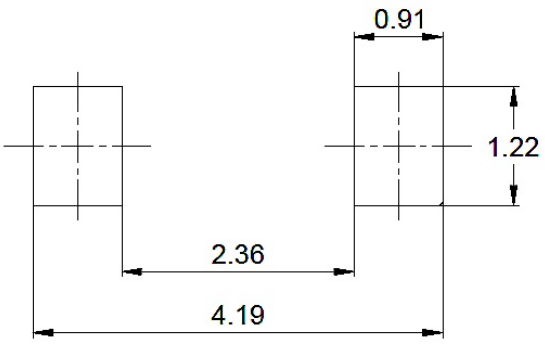
Figure 4. Derating Curve (P_D-T_A)

Package Outline Dimensions (SOD-123)



SOD-123 unit:mm		
Dim	Min	Max
A	1.45	1.75
B	2.55	2.85
C	1.00	1.30
D	0.50	0.60
E	0.25	0.45
H	0.02	0.10
J	0.05	0.15
K	3.55	3.85

Recommened Pad Layout



Unit : mm

Order Information

Device	Package	Marking	Carrier	Quantity
GS1N5711W	SOD-123	SA	Tape & Reel	3,000pcs