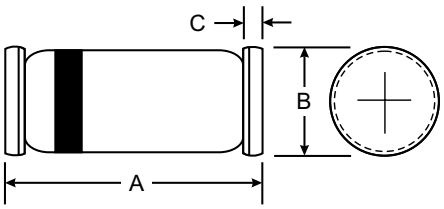
LS103A-LS103C

SMALL SIGNAL SCHOTTKY BARRIER DIODES

Features

- Integrated protection ring against static discharge
- Low capacitance
- Low leakage current
- Low forward voltage drop
- Lead (Pb)-free component
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



SOD-80		
Dim	**Min**	**Max**
A	3.30	3.70
B	1.30	1.60
C	0.28	0.50
All Dimensions in mm		

Mechanical Data

- **Case:**SOD-80 Glass case
- **Weight:** approx. 34 mg
- **Cathode Band Color:** Black
- **Packaging Codes/Options:**
  GS18 / 10 k per 13" reel (8 mm tape), 10 k/box
  GS08 / 2.5 k per 7" reel (8 mm tape), 12.5 k/box

RoHS COMPLIANT

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

Parameter	Test condition	Part	Symbol	Value	Unit
Reverse voltage		LS103A	V_R	40	V
		LS103B	V_R	30	V
		LS103C	V_R	20	V
Peak forward surge current	t_p = 300 µs, square pulse		I_{FSM}	15	A
Power dissipation	l = 4 mm, T_L = constant		P_{tot}	400	mW

Parameter	Test condition	Part	Symbol	Min	Typ.	Max	Unit
Reverse Breakdown Voltage	I_R = 10 µA	LS103A	$V_{(BR)R}$	40			V
		LS103B	$V_{(BR)R}$	30			V
		LS103C	$V_{(BR)R}$	20			V
Leakage current	V_R = 30 V	LS103A	I_R			5	µA
	V_R = 20 V	LS103B	I_R			5	µA
	V_R = 10 V	LS103C	I_R			5	µA
Forward voltage drop	I_F = 20 mA		V_F			370	mV
	I_F = 200 mA		V_F			600	mV
Diode capacitance	V_R = 0 V, f = 1 MHz		C_D		50		pF
Reverse recovery time	I_F = I_R = 50 to 200 mA, recover to 0.1 I_R		t_{rr}		10		ns

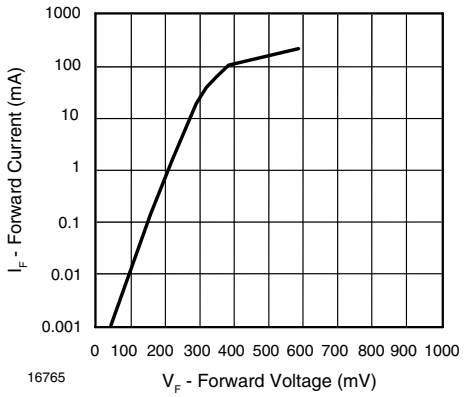


Figure 1. Forward Current vs. Forward Voltage

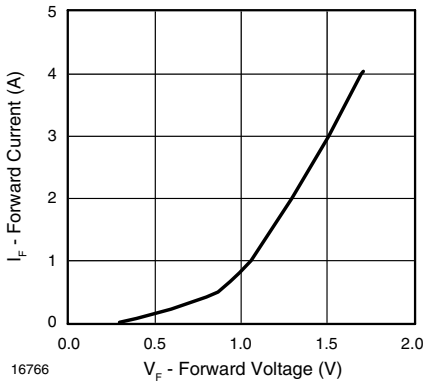


Figure 2. Forward Current vs. Forward Voltage

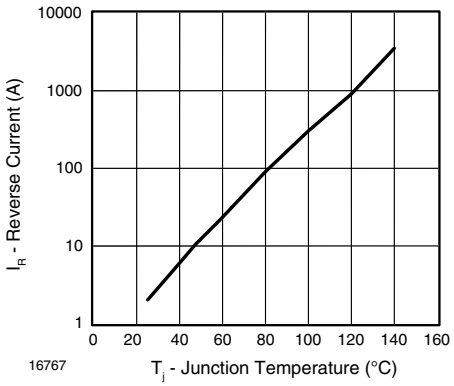


Figure 3. Reverse Current vs. Junction Temperature

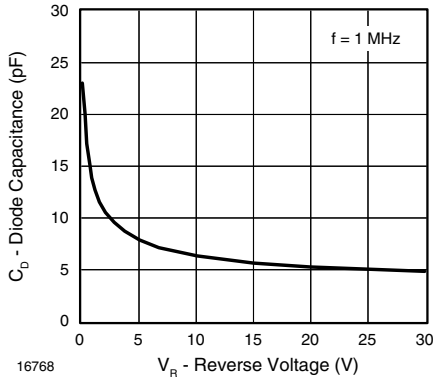


Figure 4. Diode Capacitance vs. Reverse Voltage

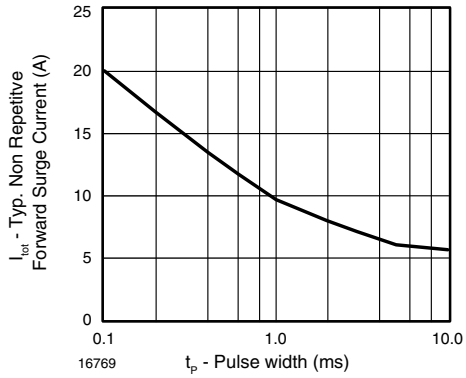


Figure 5. Typ. Non Repetitive Forward Surge Current vs. Pulse width