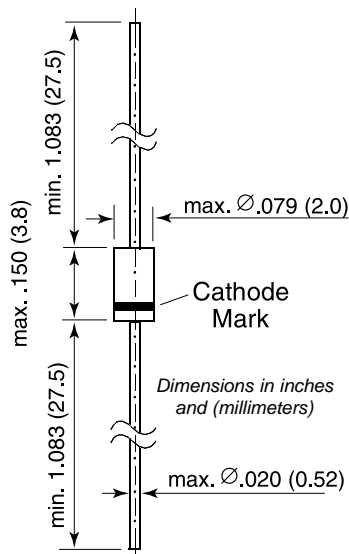


**DO-204AH (DO-35)**



### Features

- For general purpose applications
- The LL101 series is a metal-on-silicon Schottky barrier device which is protected by a PN junction guard ring.
- The low forward voltage drop and fast switching make it ideal for protection of MOS devices, steering, biasing and coupling diodes for fast switching and low logic level applications.
- These diodes are also available in the SOD-123 case with type designations SD101AW thru SD101CW and in the MiniMELF case with type designations LL101A thru LL101C.

### Mechanical Data

**Case:** DO-35 Glass Case

**Weight:** approx. 0.13g

**Packaging Codes/Options:**

D7/10K per 13" reel (52mm tape)

D8/10K per Ammo tape (52mm tape)

### Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Peak Inverse Voltage	SD101A SD101B SD101C	60 50 40	V
Power Dissipation (Infinite Heatsink)	$P_{tot}$	400 <sup>(1)</sup>	mW
Maximum Single Cycle Surge 10 $\mu$ s Square Wave	$I_{FSM}$	2	A
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	0.3 <sup>(1)</sup>	°C/mW
Junction Temperature	$T_j$	125 <sup>(1)</sup>	°C
Storage Temperature Range	$T_s$	-55 to +150 <sup>(1)</sup>	°C

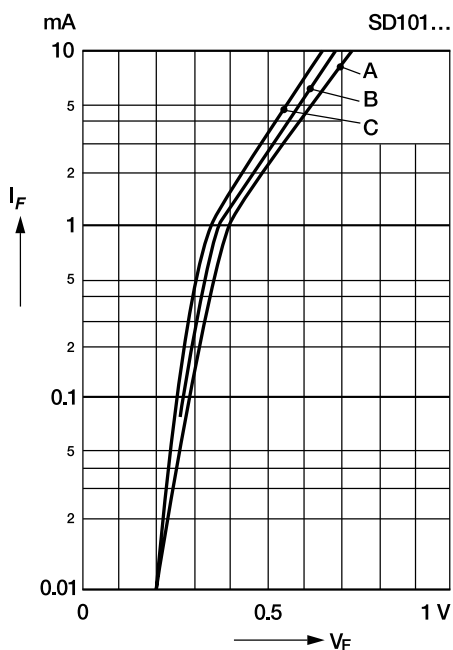
**Note:** (1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature.

### Electrical Characteristics (T<sub>J</sub> = 25°C unless otherwise noted)

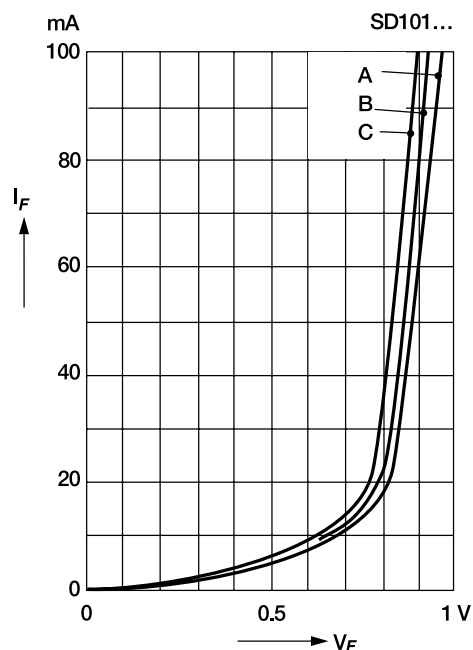
Parameter		Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	SD101A	V <sub>(BR)</sub> R	I <sub>R</sub> = 10μA	60	—	—	V
	SD101B			50	—	—	
	SD101C			40	—	—	
Leakage Current	SD101A	I <sub>R</sub>	V <sub>R</sub> = 50V	—	—	200	nA
	SD101B		V <sub>R</sub> = 40V	—	—	200	
	SD101C		V <sub>R</sub> = 30V	—	—	200	
Forward Voltage Drop	SD101A	V <sub>F</sub>	I <sub>F</sub> = 1mA	—	—	0.41	V
	SD101B			—	—	0.4	
	SD101C			—	—	0.39	
	SD101A		I <sub>F</sub> = 15mA	—	—	1	
	SD101B			—	—	0.95	
	SD101C			—	—	0.9	
Junction Capacitance	SD101A	C <sub>tot</sub>	V <sub>R</sub> = 0V, f = 1MHz	—	—	2.0	pF
	SD101B			—	—	2.1	
	SD101C			—	—	2.2	
Reverse Recovery Time		t <sub>rr</sub>	I <sub>F</sub> = I <sub>R</sub> = 5mA, recover to 0.1I <sub>R</sub>	—	—	1	ns

### Ratings and Characteristic Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

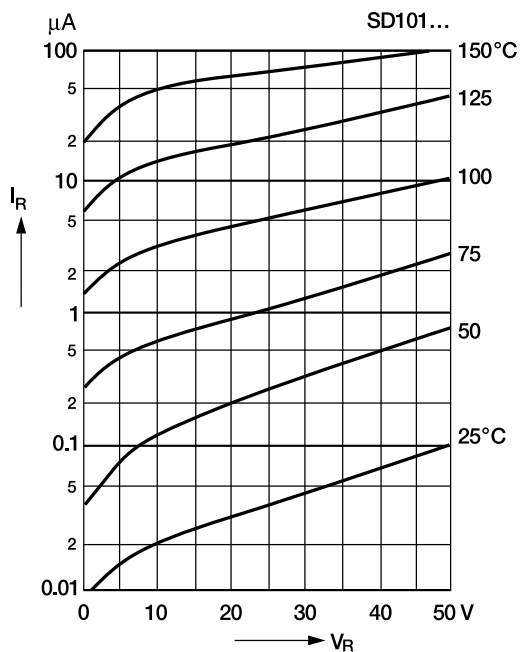
Typical variation of fwd. current  
vs. fwd. voltage for primary conduction  
through the Schottky barrier



Typical forward conduction curve  
of combination Schottky barrier  
and PN junction guard ring



Typical variation of reverse current  
at various temperatures



Typical capacitance curve as a  
function of reverse voltage

