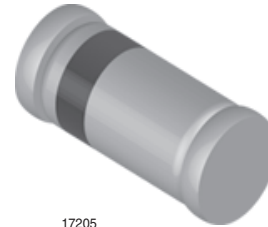


## Schottky Diodes

### Features

- For general purpose applications
- 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.
- This diode is also available in the DO-35 case with type designation 1N5711 and 1N6263.



17205

### Mechanical Data

**Case:** MiniMELF Glass Case (SOD-80)

**Weight:** approx. 31 mg

#### 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

### Parts Table

Part	Ordering code	Marking	Remarks
LL5711	LL5711-GS18 or LL5711-GS08	-	Tape and Reel
LL6263	LL6263-GS18 or LL6263-GS08	-	Tape and Reel

### Absolute Maximum Ratings

$T_{amb} = 25^{\circ}\text{C}$ , unless otherwise specified

Parameter	Test condition	Part	Symbol	Value	Unit
Peak inverse voltage		LL5711	$V_{RRM}$	70	V
		LL6263	$V_{RRM}$	60	V
Power dissipation (infinite heatsink)			$P_{tot}$	400 <sup>1)</sup>	mW
Maximum single cycle surge 10 $\mu\text{s}$ square wave			$I_{FSM}$	2.0	A

<sup>1)</sup> Valid provided that electrodes are kept at ambient temperature

### Thermal Characteristics

$T_{amb} = 25^{\circ}\text{C}$ , unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Junction temperature		$T_j$	125	$^{\circ}\text{C}$
Storage temperature range		$T_S$	- 55 to + 150	$^{\circ}\text{C}$

## Electrical Characteristics

$T_{amb} = 25^{\circ}\text{C}$ , unless otherwise specified

Parameter	Test condition	Part	Symbol	Min	Typ.	Max	Unit
Reverse breakdown voltage	$I_R = 10\ \mu\text{A}$	LL5711	$V_{(BR)R}$	70			
		LL6263	$V_{(BR)R}$	60			
Leakage current	$V_R = 50\ \text{V}$		$I_R$			200	nA
Forward voltage drop	$I_F = 1.0\ \text{mA}$		$V_F$			0.41	V
	$I_F = 15\ \text{mA}$		$V_F$			1.0	V
Diode capacitance	$V_R = 0\ \text{V}, f = 1.0\ \text{MHz}$	LL5711	$C_D$		2.0		pF
		LL6263	$C_D$		2.2		pF
Reverse recovery time	$I_F = I_R = 5\ \text{mA}$ , recover to $0.1\ I_R$		$t_{rr}$		1.0		ns

## Typical Characteristics ( $T_{amb} = 25^{\circ}\text{C}$ unless otherwise specified)

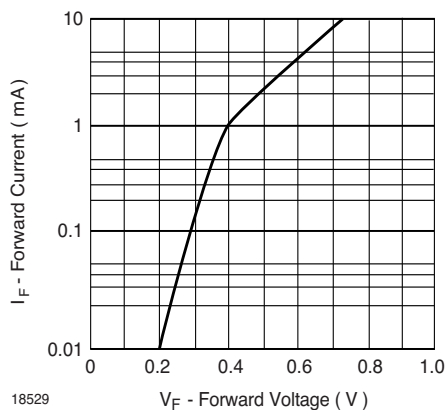


Fig. 1 Typical Variation of Forward Current vs. Forward Voltage

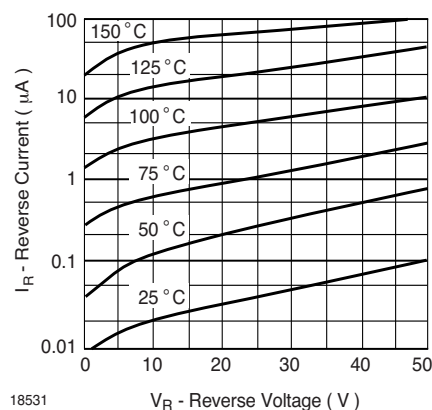


Fig. 3 Typical Variation of Reverse Current at Various Temperatures

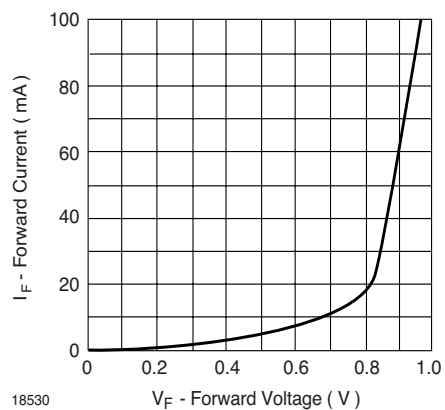


Fig. 2 Typical Forward Conduction Curve

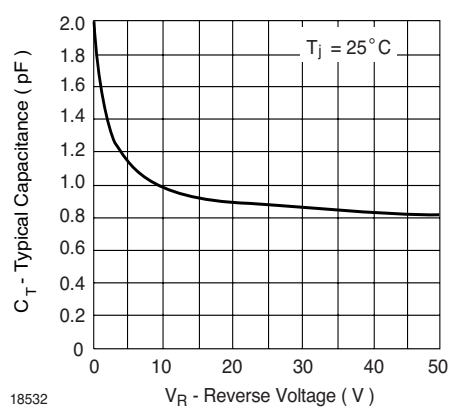
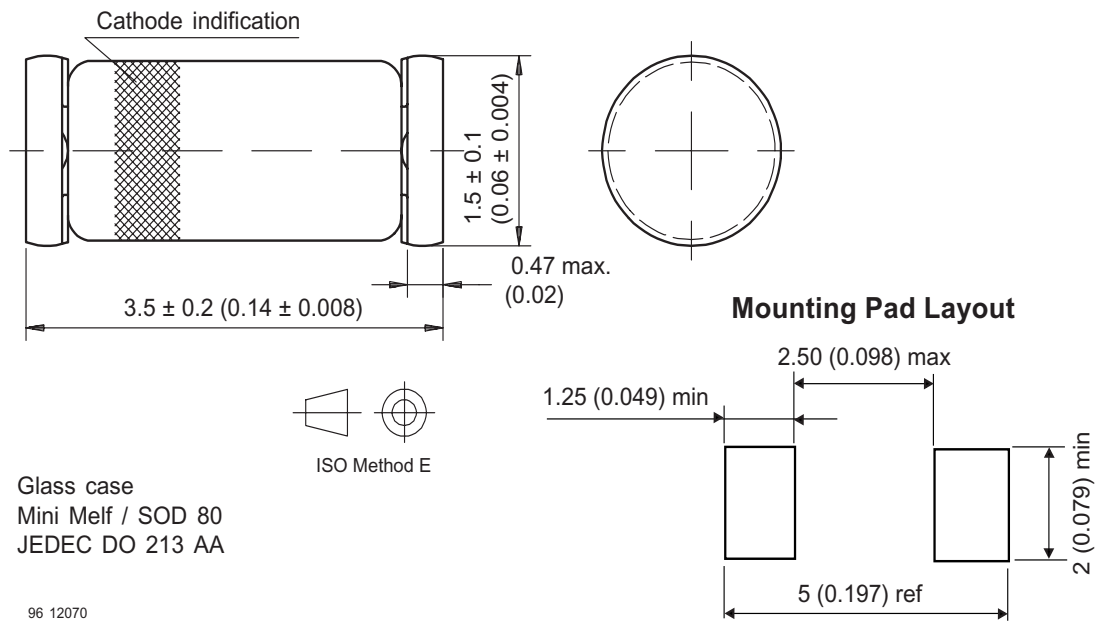


Fig. 4 Typical Capacitance Curve as a Function of Reverse Voltage



## Package Dimensions in mm (Inches)



### Ozone Depleting Substances Policy Statement

It is the policy of **Vishay Semiconductor GmbH** to

1. Meet all present and future national and international statutory requirements.
2. Regularly and continuously improve the performance of our products, processes, distribution and operating systems with respect to their impact on the health and safety of our employees and the public, as well as their impact on the environment.

It is particular concern to control or eliminate releases of those substances into the atmosphere which are known as ozone depleting substances (ODSs).

The Montreal Protocol (1987) and its London Amendments (1990) intend to severely restrict the use of ODSs and forbid their use within the next ten years. Various national and international initiatives are pressing for an earlier ban on these substances.

**Vishay Semiconductor GmbH** has been able to use its policy of continuous improvements to eliminate the use of ODSs listed in the following documents.

1. Annex A, B and list of transitional substances of the Montreal Protocol and the London Amendments respectively
2. Class I and II ozone depleting substances in the Clean Air Act Amendments of 1990 by the Environmental Protection Agency (EPA) in the USA
3. Council Decision 88/540/EEC and 91/690/EEC Annex A, B and C (transitional substances) respectively.

**Vishay Semiconductor GmbH** can certify that our semiconductors are not manufactured with ozone depleting substances and do not contain such substances.

**We reserve the right to make changes to improve technical design  
and may do so without further notice.**

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