

Features

1. For general purpose applications
2. 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.

Mechanical Data

Case: DO-35 Glass Case

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

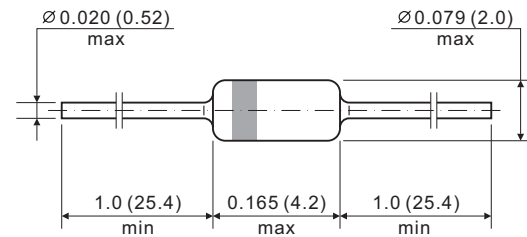
Polarity: Colour band denotes cathode end

Mounting Position: Any

Weight: approx. 0.005 ounce, 0.14grams

Standard Glass Case JEDEC DO-35

Dimensions in inches and (mm)


Absolute Maximum Ratings $T_{amb} = 25^{\circ}\text{C}$ unless otherwise specified

Parameter	Test Condition	Part	Symbol	Value	Unit
Repetitive peak revers voltage		1N5711	V_{RRM}	70	V
		1N6263	V_{RRM}	60	V
Peak forward surge current	$t_p = 10 \mu\text{s}$		I_{FSM}	2.0	A
Power dissipation	$l = 4 \text{ mm}, T_L = \text{constant}$		P_{tot}	400	mW

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

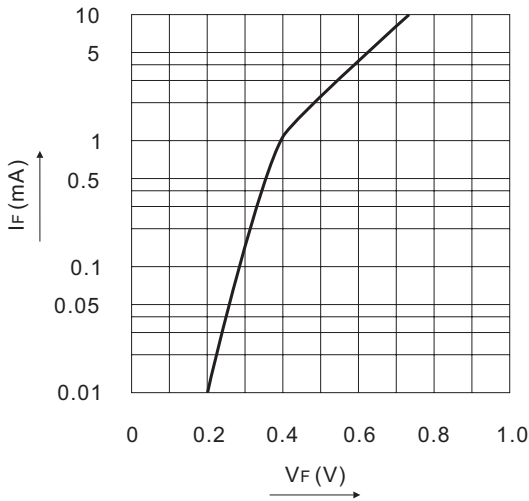
Parameter	Test Condition	Symbol	Value	Unit
Thermal resistance, Junction to ambient	$l = 4 \text{ mm}, T_L = \text{constant}$	R_{thJA}	350	$^{\circ}\text{C} / \text{W}$
Junction temperature		T_j	125	$^{\circ}\text{C}$
Storage temperature		T_{stg}	-65 ~ 175	$^{\circ}\text{C}$

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

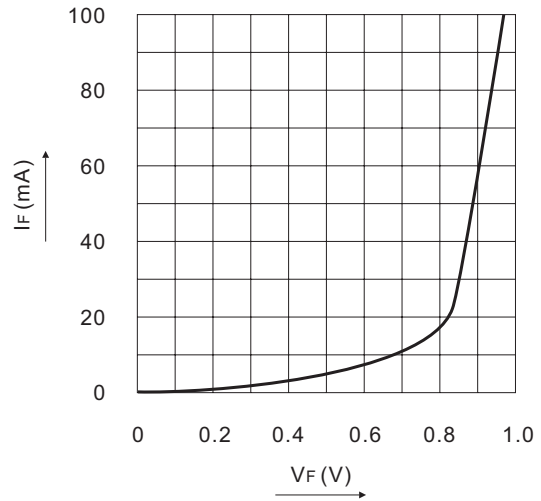
Parameter	Test Condition	Part	Symbol	Min	Typ.	Max	Unit
Reverse breakdown voltage	$I_R = 10 \mu\text{A}$	1N5711	V_R	70	—	—	V
		1N6263	V_R	60	—	—	V
Forward voltage	$I_F = 1.0 \text{ mA}$		V_F	—	—	0.41	V
	$I_F = 15 \text{ mA}$		V_F	—	—	1.0	V
Reverse leakage current	$V_R = 50 \text{ V}$		I_R	—	—	200	nA
Diode capacitance	$V_R = 0\text{V}, f = 1.0\text{MHz}$	1N5711	C_{tot}	—	2.0	—	pF
		1N6263	C_{tot}	—	2.2	—	pF
Reverse recovery time	$I_F = 5\text{mA}, I_R = 5\text{mA}, I_{rr} = 0.1\text{mA}, R_L = 100 \Omega$		t_{rr}	—	—	1.0	ns

Ratings and Characteristic Curves $T_{amb} = 25^{\circ}C$ unless otherwise specified

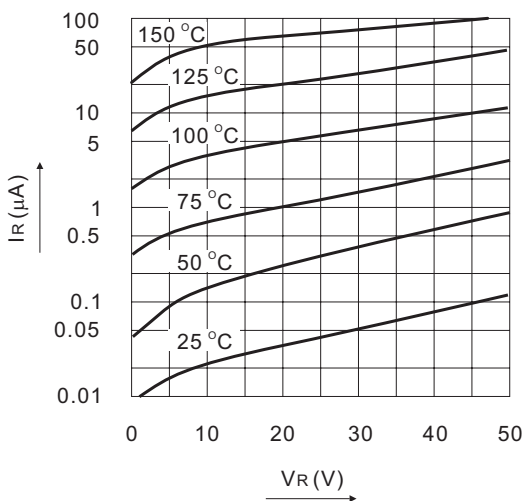
Typical variation of forward current versus forward voltage for primary conduction through the Schottky barrier



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



Typical variation of reverse current at various temperatures



Typical Diode capacitance curve as a function of reverse voltage

