

SMALL SIGNAL SCHOTTKY DIODES

VOLTAGE RANGE: 50 V
CURRENT: 0.2 A

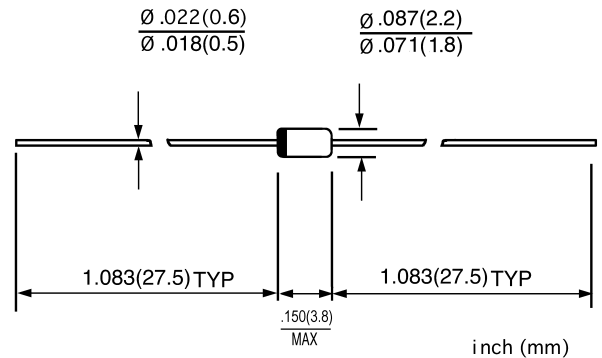
FEATURES

- ◇ For general purpose applications
- ◇ This diodes features very low turn-on voltage and fast switching. This devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges
- ◇ Metal 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: JEDEC DO--35, glass case
- ◇ Polarity: Color band denotes cathode end
- ◇ Weight: Approx. 0.13 gram

DO - 35(GLASS)



ABSOLUTE RATINGS

	Symbols	Value	UNITS
Continuous reverse voltage	V_R	50.0	V
Forward continuous current @ $T_A=25^\circ\text{C}$	I_F	200 ¹⁾	mA
Repetitive peak forward current @ $t_p<1\text{s}, \delta \leq 0.5, T_A=25^\circ\text{C}$	I_{FRM}	500 ¹⁾	mA
Power dissipation @ $T_A=25^\circ\text{C}$	P_{tot}	200 ¹⁾	mw
Junction temperature	T_J	125	$^\circ\text{C}$
Ambient operating temperature range	T_A	-55 ---+ 125	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 ---+ 150	$^\circ\text{C}$

1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature

ELECTRICAL CHARACTERISTICS

	Symbols	Min.	Typ.	Max.	UNITS
Reverse breakdown voltage tested with 100 μ A pulses	V_R	50.0			V
Forward voltage Pulse test $t_p<300 \mu\text{s}, \delta < 2\%$ @ $I_F=0.1\text{mA}$ @ $I_F=1\text{mA}$ @ $I_F=10\text{mA}$ @ $I_F=30\text{mA}$ @ $I_F=100\text{mA}$	V_F		0.2 0.275 0.365 0.46 0.7	0.3 0.38 0.45 0.6 0.9	V
Leakage current $V_R=40\text{V}$	I_R			5.0	μA
Junction capacitance at $V_R=1\text{V}, f=1\text{MHz}$	C_J			8	pF
Reverse recovery time form $I_F=10\text{mA}$ to $I_R=10\text{mA}$ to $I_R=1\text{mA}$	t_{rr}			5	ns
Thermal resistance junction to ambient air	$R_{\theta JA}$			300 ¹⁾	$^\circ\text{C/W}$

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