

SMALL SIGNAL SCHOTTKY DIODES

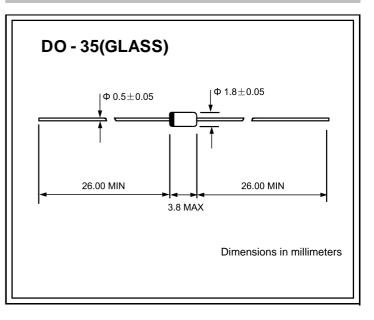
VOLTAGE RANGE: 50 V CURRENT: 0.2 A

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

- ♦ Polarity: Color band denotes cathode end
- ♦ Weight: Approx. 0.13 gram



ABSOLUTE RATINGS

	Symbols	Value	UNITS
Continuous reverse voltage	V _R	50.0	V
Forward continuous current @ TA=25°C	I _F	200 ¹⁾	mA
Repetitive peak forw ard current @ tp<1s, δ <=0.5,Ta=25°C	I _{FRM}	500 ¹⁾	mA
Pow er dissipation @ T _A =25 ℃	P _{tot}	200 ¹⁾	mw
Junction temperature	T _J	125	$^{\circ}$
Ambient operating temperature range	T _A	-55+ 125	$^{\circ}$
Storage temperature range	T _{STG}	-55+ 150	$^{\circ}$

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

ELECTRICAL CHARACTERISTICS

	Symbols	Min.	Тур.	Max.	UNITS
Reverse breakdown voltage tested with 100 µ A pulses	V_R	50.0			V
Forw ard voltage					
Pulse test tp<300 μ s, δ <2%					
@ IF=0.1mA			0.2	0.3	V
@ IF=1mA	V_{F}		0.275	0.38	V
@ IF=10mA			0.365	0.45	V
@ I==30mA			0.46	0.6	V
@ IF=100mA			0.7	0.9	V
Leakage current V _R =40V	I _R			5.0	μ A
Junction capacitance at V _R =1V,f=1MHz	C_{J}			8	pF
Reverse recovery time form I _F =10mA to I _R =10mA to I _R =1mA	t _{rr}			5	ns
Thermal resistance junction to ambient air	$R_{\theta JA}$			300 ¹⁾	°CW

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