

SMALL SIGNAL SCHOTTKY DIODE

VOLTAGE RANGE: 100 V
CURRENT: 100 mA

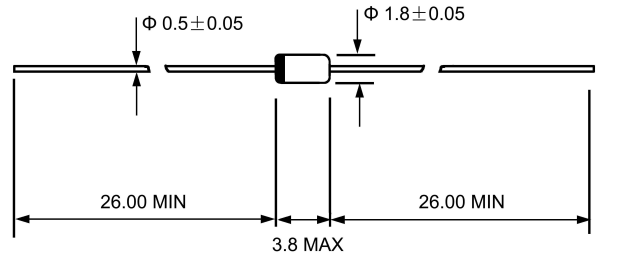
FEATURES

- ◇ For general purpose applications
- ◇ This diode features very low turn-on voltage and fast switching. These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges

MECHANICAL DATA

- ◇ Case: JEDEC DO--35, glass case
- ◇ Polarity: Color band denotes cathode end
- ◇ Weight: Approx. 0.13 gram

DO - 35(GLASS)



Dimensions in millimeters

ABSOLUTE RATINGS

	Symbols	Value	UNITS
Continuous reverse voltage	V_{RRM}	100	V
Forward continuous current @ $T_A=25^\circ\text{C}$	I_F	100 ¹⁾	mA
Repetitive peak forward current tp 1s, 0.5	I_{FRM}	350 ¹⁾	mA
Surge forward current @tp 10ms	I_{FSM}	750 ¹⁾	mA
Power dissipation @ $T_A=95^\circ\text{C}$	P_{tot}	100 ¹⁾	mW
Junction temperature	T_J	-55 ---+ 125	$^\circ\text{C}$
Ambient operating temperature range	T_L	230	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 ---+ 150	$^\circ\text{C}$

1) On infinite heatsink with 4mm lead length.

ELECTRICAL CHARACTERISTICS

	Symbols	Min.	Typ.	Max.	UNITS
Reverse breakdown voltage @ $I_R=100\mu\text{A}, T_J=25^\circ\text{C}$	V_{BR}	100	-	-	V
Forward voltage @ $I_F=1\text{mA}, T_J=25^\circ\text{C}$	V_F	-	0.4	0.45	V
@ $I_F=200\text{mA}, T_J=25^\circ\text{C}$		-	-	1.0	
Leakage current @ $T_J=25^\circ\text{C}$	I_R	-	-	0.1	μA
$V_R=50\text{V}$ @ $T_J=100^\circ\text{C}$		-	-	20	
Junction capacitance at $V_R=1\text{V}, f=1\text{MHz}$	C_J	-	-	20	pF
Thermal resistance junction to ambient	$R_{\theta JA}$	-	-	300 ¹⁾	$^\circ\text{C/W}$

2) Pulse test tp<300 μs , δ <2%

FIG.1 – ADMISSIBLE POWER DISSIPATION VS. AMBIENT TEMPERATURE

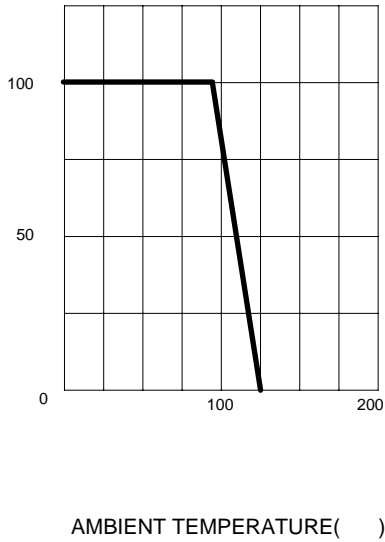


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

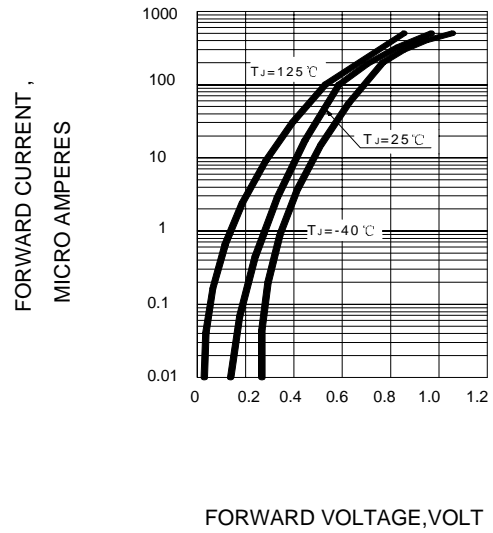


FIG.3 – TYPICAL REVERSE CHARACTERISTICS

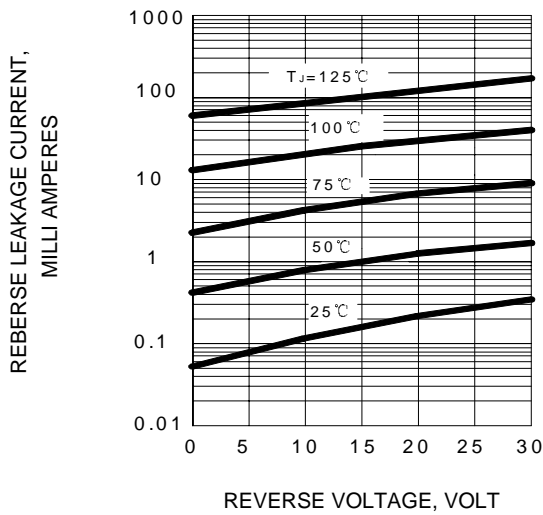


FIG.4 – TYPICAL JUNCTION CAPACITANCE

