

## SMALL SIGNAL SCHOTTKY DIODE

VOLTAGE RANGE: 30 V  
CURRENT: 0.2 A

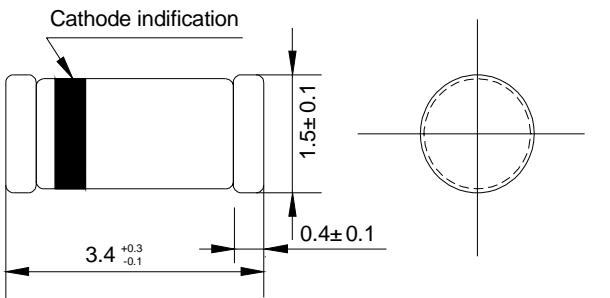
## FEATURES

- ◇ 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 mini-melf, glass case
- ◇ Polarity: Color band denotes cathode end
- ◇ Weight: Approx. 0.031 grams

## Mini-melf



Dimensions in millimeters

## ABSOLUTE RATINGS

	Symbols	Value	UNITS
Continuous reverse voltage	$V_R$	30.0	V
Forward continuous current @ $T_A=25^\circ C$	$I_F$	200 <sup>1)</sup>	mA
Peak forward current @ $T_A=25^\circ C$	$I_{FM}$	300 <sup>1)</sup>	mA
Surge forward current @ $t_p < 1s, T_A=25^\circ C$	$I_{FSM}$	5 <sup>1)</sup>	A
Power dissipation @ $T_A=65^\circ C$	$P_{tot}$	200 <sup>1)</sup>	mW
Junction temperature	$T_J$	125	°C
Ambient operating temperature range	$T_A$	-55 ---- 125	°C
Storage temperature range	$T_{STG}$	-55 ---- 150	°C

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

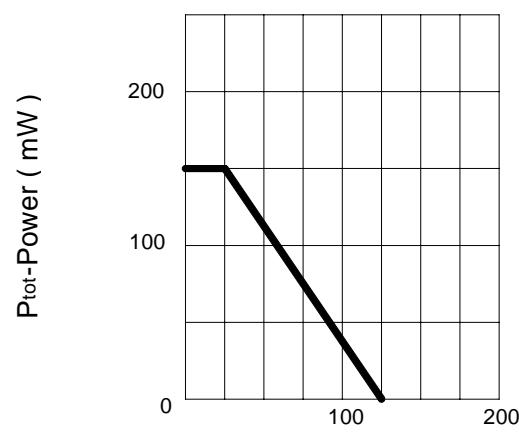
## ELECTRICAL CHARACTERISTICS

	Symbols	Min.	Typ.	Max.	UNITS
Reverse breakdown voltage	$V_R$	30.0			V
Forward voltage Pulse test $t_p < 300 \mu s, \delta < 2\%$	$V_F$				V
@ $I_F=0.1mA$				0.24	V
@ $I_F=1mA$				0.32	V
@ $I_F=10mA$				0.4	V
@ $I_F=30mA$			0.5		V
@ $I_F=100mA$				0.8	V
Leakage current $V_R=25V$	$I_R$			2.0	$\mu A$
Junction capacitance at $V_R=1V, f=1MHz$	$C_J$			10	pF
Reverse recovery time @ $I_F=10mA, I_R=10mA, I_L=1mA$	$t_{rr}$			5	ns
Thermal resistance junction to ambient	$R_{\theta JA}$			430 <sup>1)</sup>	°C/W

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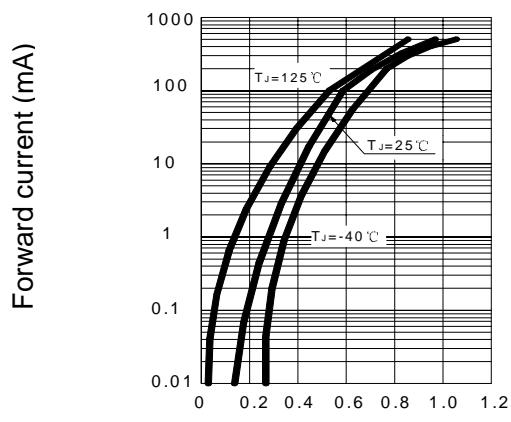
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**FIG.1 – ADMISSIBLE POWER DISSIPATION VS. AMBIENT TEMPERATURE**



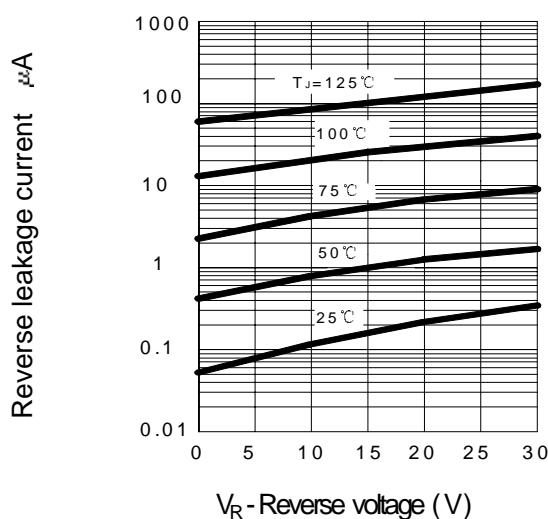
$T_A$  - Ambient temperature(°C )

**FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



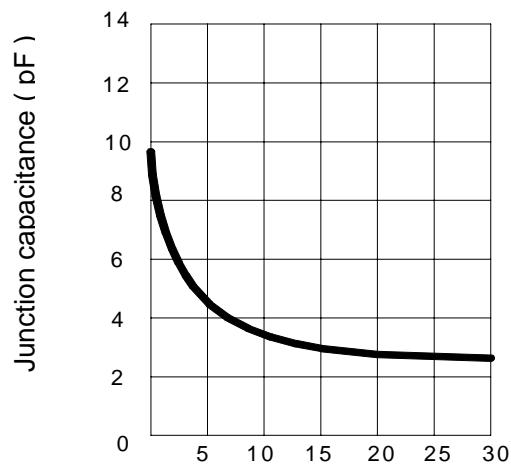
$V_F$  - Forward Voltage (V)

**FIG. 3 – TYPICAL REVERSE CHARACTERISTICS**



$V_R$  - Reverse voltage (V)

**FIG.4 – TYPICAL JUNCTION CAPACITANCE**



$V_R$  - Reverse voltage (V)