

VOLTAGE RANGE: 30 V

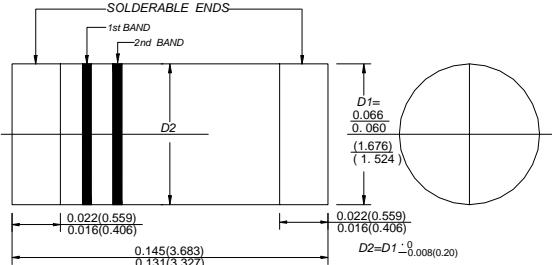
CURRENT: 0.2 A

**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****ABSOLUTE RATINGS**

	Symbols	Value	UNITS
Continuous reverse voltage	$V_R$	30.0	V
Forward continuous current @ $T_A=25^\circ\text{C}$	$I_F$	200 <sup>1)</sup>	mA
Peak forward current @ $T_A=25^\circ\text{C}$	$I_{FM}$	300 <sup>1)</sup>	mA
Surge forward current @ $t_p < 1\text{s}, T_A=25^\circ\text{C}$	$I_{FSM}$	600 <sup>1)</sup>	mA
Power dissipation @ $T_A=65^\circ\text{C}$	$P_{tot}$	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

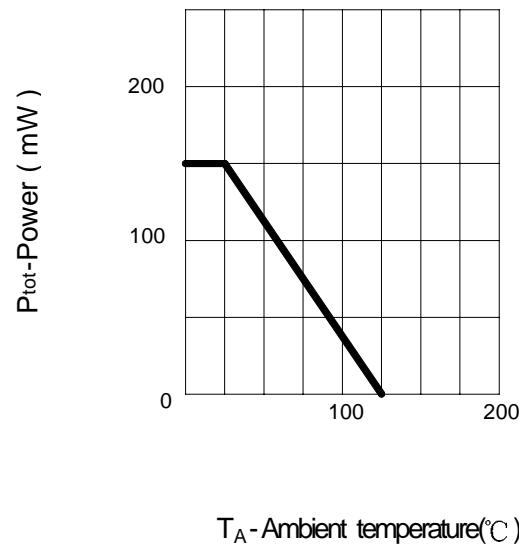
1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature

**ELECTRICAL CHARACTERISTICS**

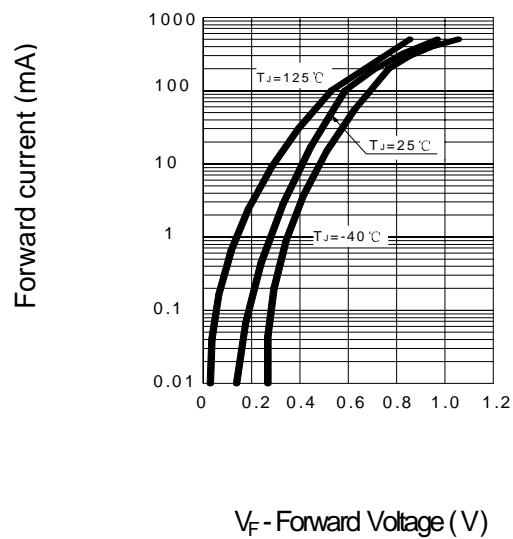
	Symbols	Min.	Typ.	Max.	UNITS
Reverse breakdown voltage	$V_R$	30.0			V
Forward voltage Pulse test $t_p < 300 \mu\text{s}, \delta < 2\%$	$V_F$				
@ $I_F=0.1\text{mA}$				0.24	V
@ $I_F=1\text{mA}$				0.32	V
@ $I_F=10\text{mA}$				0.4	V
@ $I_F=30\text{mA}$			0.5		V
@ $I_F=100\text{mA}$				0.8	V
Leakage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

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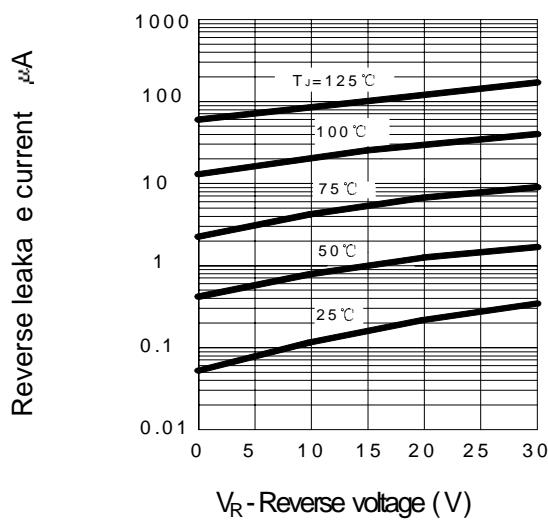
**FIG.1 – ADMISSIBLE POWER DISSIPATION VS. AMBIENT TEMPERATURE**



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



**FIG. 3 – TYPICAL REVERSE CHARACTERISTICS**



**FIG.4 – TYPICAL JUNCTION CAPACITANCE**

