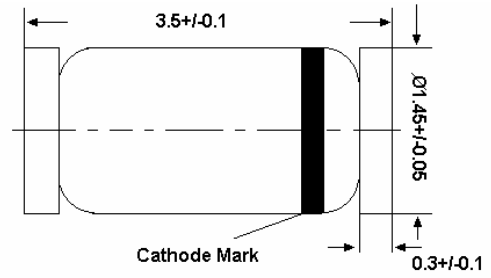


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HIGH SPEED DIODE

FEATURES

- Small hermetically-sealed glass SMD package
- High switching speed
- Continuous reverse voltage
- Repetitive peak reverse voltage
- Repetitive peak forward current



Glass case MiniMELF
Dimensions in mm

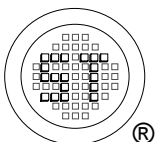
APPLICATION

- High-Speed Switching
- Fast Logic Applications

Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Repetitive peak reverse voltage	V_{RRM}	75	V
Continuous reverse voltage	V_R	75	V
Continuous forward current (note1)	I_F	200	mA
Repetitive peak forward current	I_{FRM}	450	mA
Non-repetitive peak forward current Square wave, $T_j = 25^\circ\text{C}$ prior to surge	I_{FSM}	$t=1\ \mu\text{s}$ 4	A
		$t=1\text{ms}$ 1	
		$t=1\text{s}$ 0.5	
Power dissipation	P_{tot}	500	mW
Junction temperature	T_j	200	$^\circ\text{C}$
Storage temperature range	T_s	-65 to +200	$^\circ\text{C}$
Thermal resistance from junction to tie point	R_{thjtp}	300	K/W
Thermal resistance from junction to ambient	R_{thja}	350	K/W

Note 1: Device mounted on an FR4 printed- circuit board.



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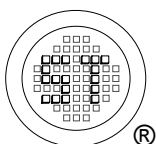
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Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Forward voltage at $I_F = 5\text{mA}$	V_F	620	-	750	mV
at $I_F = 100\text{mA}$	V_F	-	-	1000	mV
at $I_F = 100\text{mA}$, $T_j = 100^\circ\text{C}$	V_F	-	-	930	mV
Reverse current at $V_R = 20\text{V}$	I_R	-	-	25	nA
at $V_R = 75\text{V}$	I_R	-	-	5	μA
at $V_R = 20\text{V}$, $T_j = 150^\circ\text{C}$	I_R	-	-	50	μA
at $V_R = 75\text{V}$, $T_j = 150^\circ\text{C}$	I_R	-	-	100	μA
Reverse breakdown voltage at $I_R = 100\mu\text{A}$	$V_{(BR)R}$	100	-	-	V
Diode capacitance $f = 1\text{MHz}$	C_d	-	-	2	pF
Reverse recovery time at $I_F = 10\text{mA}$, $I_R = 10\text{mA}$, $R_L = 100\Omega$ measured at $I_R = 1\text{mA}$	t_{rr}	-	-	4	ns
Forward recovery voltage $I_F = 50\text{mA}$, $t_r = 20\text{ns}$	V_{fr}	-	-	2.5	V



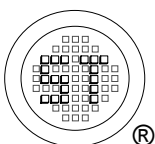
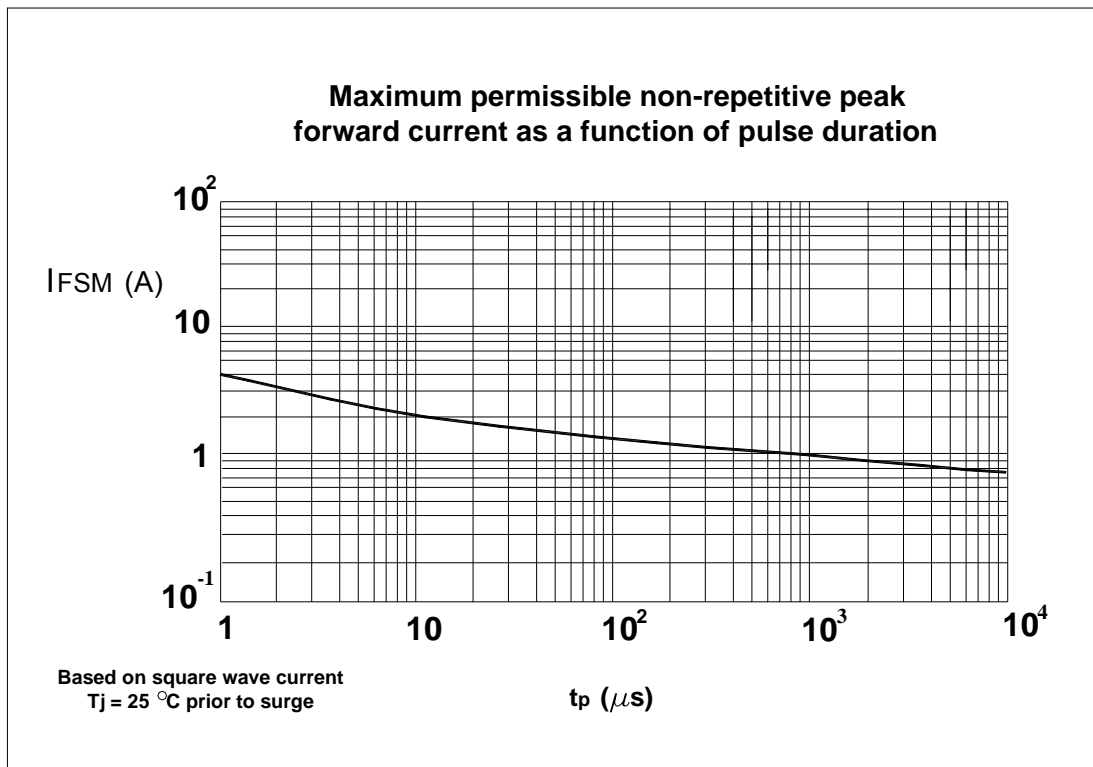
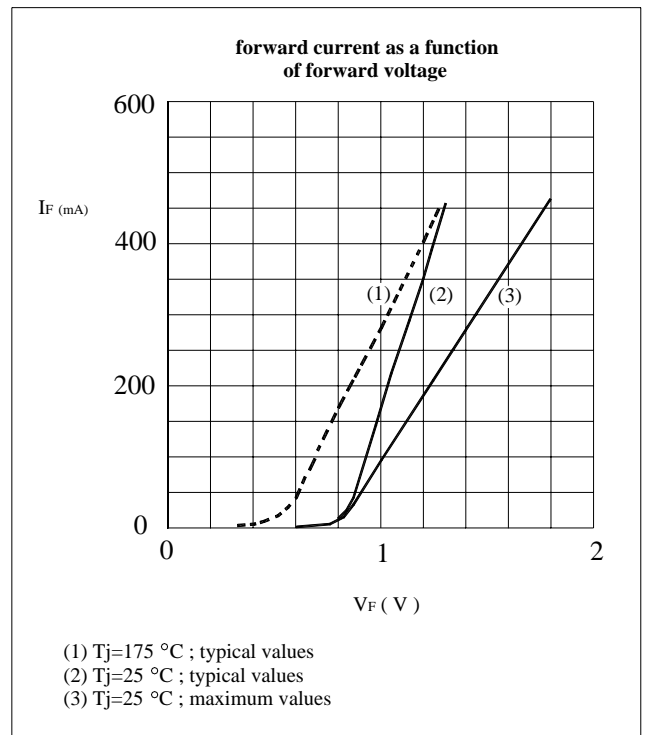
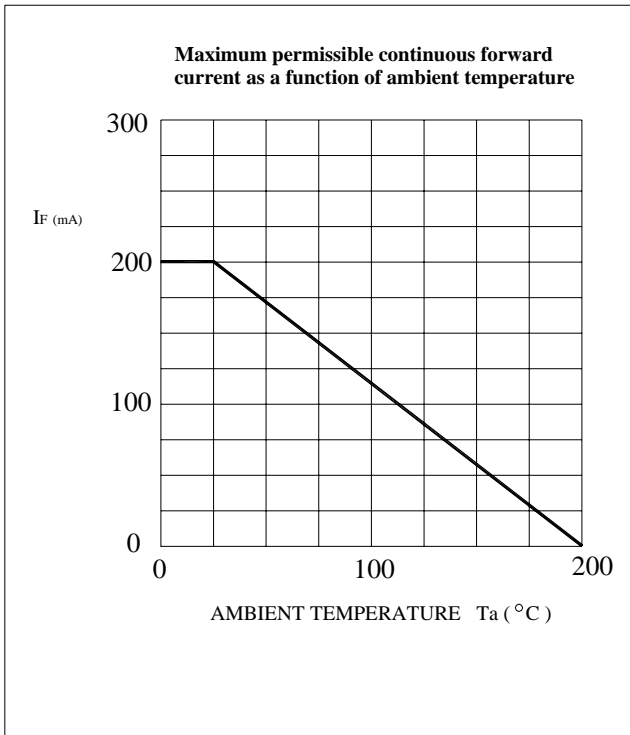
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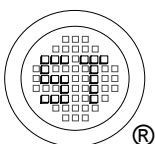
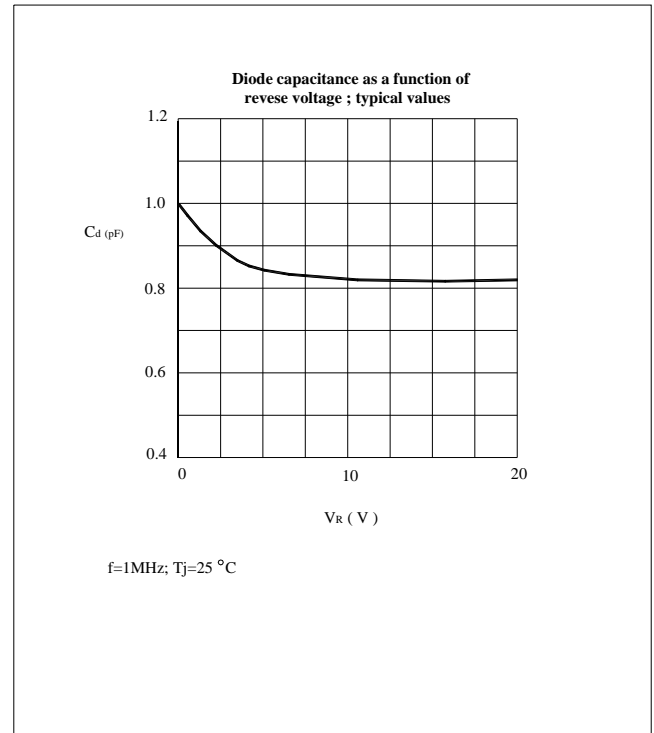
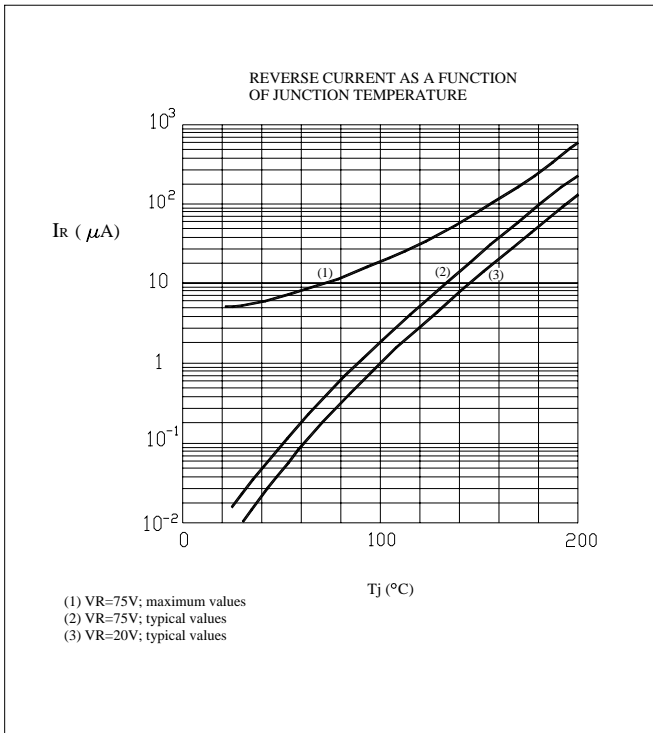
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