

EGF1A - EGF1D

Features

- Low forward voltage drop.
- Low profile package.
- Fast switching for high efficiency.



Fast Rectifiers (Glass Passivated)

Absolute Maximum Ratings* T_A = 25°C unless otherwise noted

Symbol	Parameter	Value				Units
	i di dilletei		1B	1C	1D	Onits
V_{RRM}	Maximum Repetitive Reverse Voltage	50	100	150	200	V
I _{F(AV)}	Average Rectified Forward Current, @ T _L = 100°C	1.0		A		
I _{FSM}	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	30		А		
T _{stg}	Storage Temperature Range -65 to +175		°C			
T_J	Operating Junction Temperature	-65 to +175		°C		

^{*}These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Thermal Characteristics

Symbol	Parameter	Value	Units
P_{D}	Power Dissipation	2.0	W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient*	85	°C/W
$R_{\theta JL}$	Thermal Resistance, Junction to Lead*	30	°C/W

^{*}Device mounted on FR-4 PCB 0.013 mm.

Electrical Characteristics T_A = 25°C unless otherwise noted

Symbol	Parameter		Device				Units
-			1A	1B	1C	1D	
V _F	Forward Voltage @ 1.0 A			1.0)		V
t _{rr}	Reverse Recovery Time $I_F = 0.5 \text{ A}, I_R = 1.0 \text{ A}, I_{RR} = 0.25 \text{ A}$			50)		ns
I _R	Reverse Current @ rated V _R	$T_A = 25^{\circ}C$ $T_A = 100^{\circ}C$		10 10			μΑ μΑ
Ст	Total Capacitance V _R = 4.0 V, f = 1.0 MHz			15	;		pF

Typical Characteristics

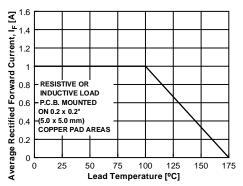
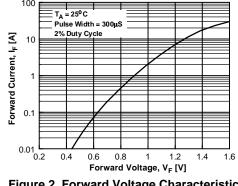


Figure 1. Forward Current Derating Curve



100

Figure 2. Forward Voltage Characteristics

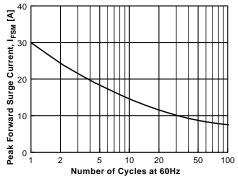


Figure 3. Non-Repetitive Surge Current

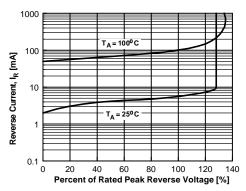


Figure 4. Reverse Current vs Reverse Voltage

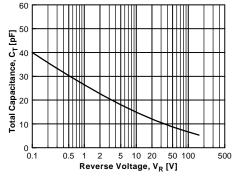
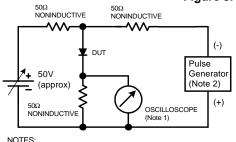
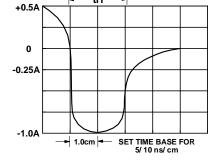


Figure 5. Total Capacitance



1. Rise time = 7.0 ns max; Input impedance = 1.0 megaohm 22 pf. 2. Rise time = 10 ns max; Source impedance = 50 ohms.



Reverse Recovery Time Characterstic and Test Circuit Diagram

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