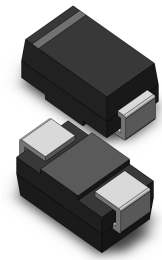
EGF1A - EGF1D

ULTRAFAST SURFACE MOUNT RECTIFIER DIODES

VOLTAGE RANGE: 50 - 200V
CURRENT: 1.0 A



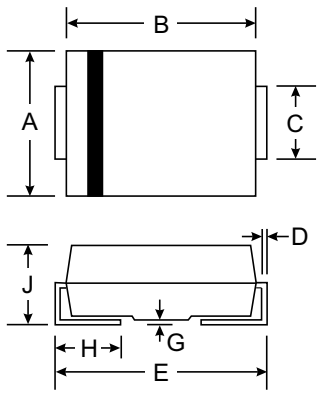
Features

- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-0
- Ideal for surface mount automotive applications
- High temperature metallurgically bonded construction
- Superfast recovery times for high efficiency
- Glass passivated cavity-free junction
- Built-in strain relief
- Easy pick and place

Mechanical Data

- Case: SMA(DO-214AC)Molded Plastic
- Terminals: Solder Plated Terminal - Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)
- Mounting Position: Any

RoHS COMPLIANT



SMA(DO-214AC)		
Dim	**Min**	**Max**
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics

T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	EGF1A	EGF1B	EGF1C	EGF1D	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	150	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	105	140	V
Average Rectified Output Current @ T_T = 75°C	I_O	1.0				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave Superimposed on Rated Load	I_{FSM}	30				A
(JEDEC Method) Forward Voltage Drop @ I_F = 1.0A	V_{FM}	1.0				V
Peak Reverse Current @ T_A = 25°C at Rated DC Blocking Voltage @ T_A = 125°C	I_{RM}	5.0 50				μA
Reverse Recovery Time (Note 2)	t_{rr}	50				ns
Typical Junction Capacitance (Note 1)	C_j	15				pF
Typical Thermal Resistance, Junction to Terminal	$R_{\theta JT}$	30				°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150				°C

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A.

RATINGS AND CHARACTERISTICS CURVES EGF1A THRU EGF1D

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE

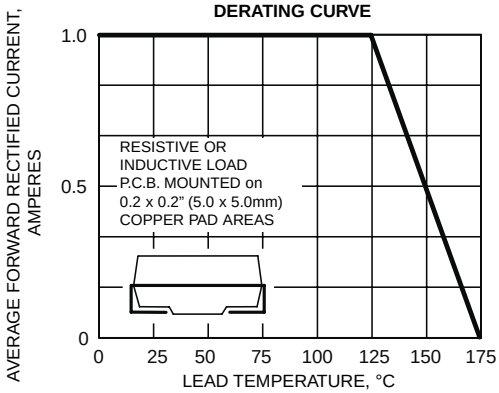


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

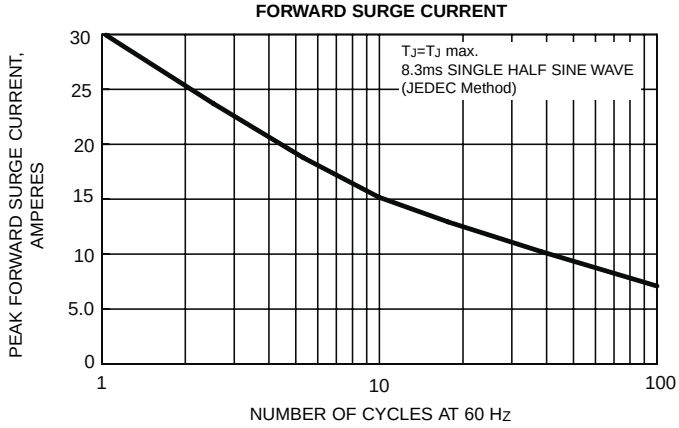


FIG. 3 -TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

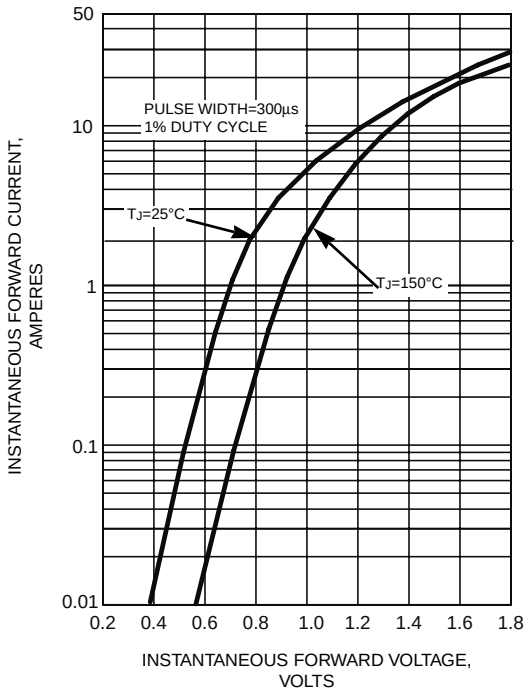


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

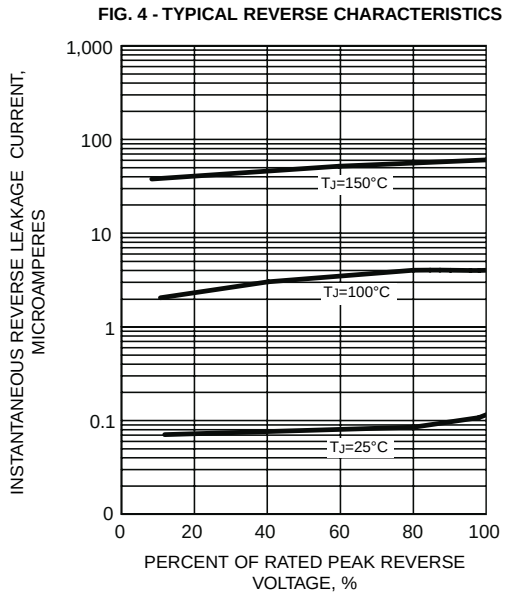


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

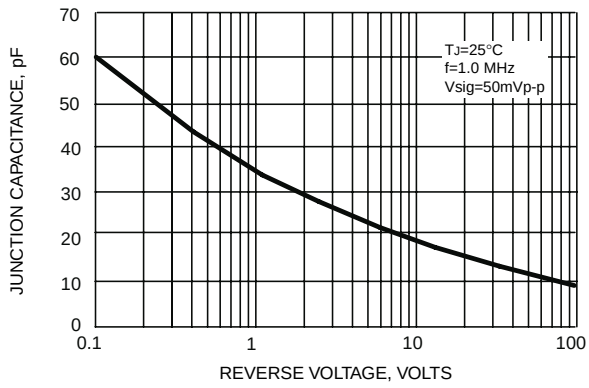


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE