

Silicon Diode

EGF1A

50V / 1A

DATASHEET

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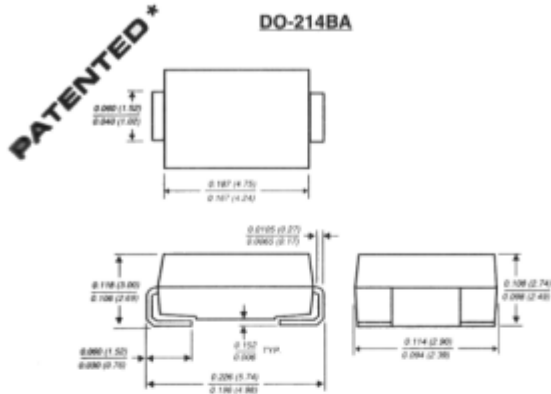
OEM – General Semiconductor

Source: General Semiconductor Databook 1998

EGF1A THRU EGF1D

ULTRA FAST SURFACE MOUNT RECTIFIER

Reverse Voltage - 50 to 200 Volts Forward Current - 1.0 Ampere



Dimensions in inches and (millimeters)
 * Glass-plastic encapsulation technique is covered by Patent No. 3,996,602, brazed-lead assembly by Patent No. 3,930,306 and lead forming by Patent No. 5,151,846



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
- ◆ High temperature soldering guaranteed: 450°C/5 seconds at terminals
- ◆ Complete device submersible temperature of 265°C for 10 seconds in solder bath



MECHANICAL DATA

Case: JEDEC DO-214BA molded plastic over glass body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Weight: 0.0048 ounces, 0.120 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	EGF1A	EGF1B	EGF1C	EGF1D	UNITS
Device Marking Code		EA	EB	EC	ED	
Maximum repetitive peak reverse voltage	VRRM	50	100	150	200	Volts
Maximum RMS voltage	VRMS	35	70	105	140	Volts
Maximum DC blocking voltage	VDC	50	100	150	200	Volts
Maximum average forward rectified current at T _L =125°C	I(AV)	1.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30.0				Amps
Maximum instantaneous forward voltage at 1.0A	V _F	1.0				Volts
Maximum DC reverse current at rated DC blocking voltage	I _R	5.0 50.0				μA
Typical reverse recovery time (NOTE 1)	t _{rr}	50.0				ns
Typical junction capacitance (NOTE 2)	C _J	15.0				pF
Typical thermal resistance (NOTE 3)	RθJA RθJL	85.0 30.0				°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +175				°C

NOTES:
 (1) Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
 (2) Measured at 1.0 MHz and applied V_R=4.0 Volts
 (3) Thermal resistance from junction to ambient and from junction to lead
 P.C.B. mounted on 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas

RATINGS AND CHARACTERISTICS CURVES EGF1A THRU EGF1D

