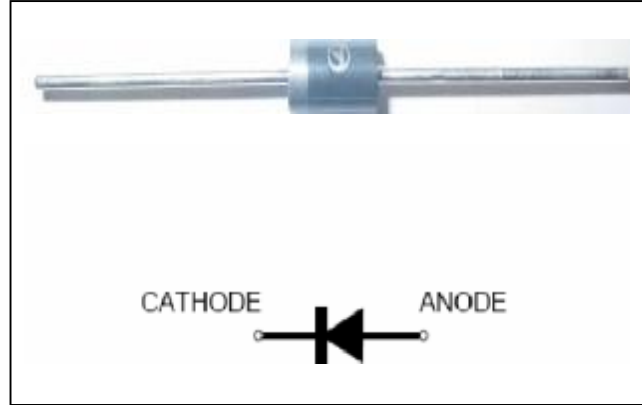


EG01CS

Fast Recovery Rectifiers Reverse Voltage 1000V Forward Current 0.5A

Feature & Dimensions

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * High temperature metallurgically bonded construction
- * Diffused junction
- * Capable of meeting environmental standards of MIL-S-19500
- * 1.0 A operation at $T_A=55^{\circ}\text{C}$ with no thermal runaway
- * For use in high frequency rectifier circuits
- * Fast switching for high efficiency
- * Typical IR less than $1.0\mu\text{A}$
- * High temperature soldering guaranteed:
350°C/10 seconds
- * 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension



We declare that the material of product compliance with ROHS requirements

Mechanical Data

Case: JEDEC R-1, molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.0084 oz., 0.214 g

Handling precaution: None

1. Electrical Characteristic

Maximum & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	EG01CS	Unit
device marking code		EG01CS	
Maximum repetitive peak reverse voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC blocking voltage	V_{DC}	1000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A = 55^{\circ}\text{C}$	$I_{F(AV)}$	0.5	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25	A
Maximum full load reverse current, full cycle average, 0.375" (9.5mm) lead lengths at $T_A = 55^{\circ}\text{C}$	$I_{R(AV)}$	100	μA
Typical thermal resistance (Note 2)	$R_{\theta JA}$	50	$^{\circ}\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55to +150	$^{\circ}\text{C}$

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	EG01CS	Unit
Maximum instantaneous forward voltage at 1.0A	V_F	3.3	V
Maximum DC reverse current $T_A = 25^{\circ}\text{C}$ at rated DC blocking voltage $T_A = 100^{\circ}\text{C}$	IR	5.0 200	μA
Typical reverse recovery time (Note 1)	t_{rr}	75	ns
Typical junction capacitance at 4.0V, 1MHz	CJ	15	PF

NOTES:

1. $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$

2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

EG01CS

2. Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

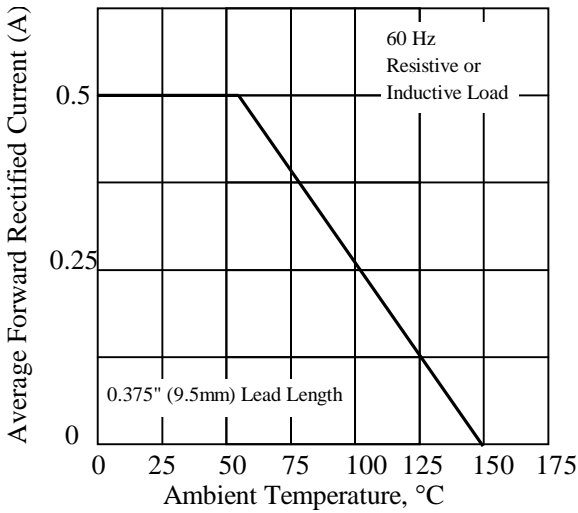


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

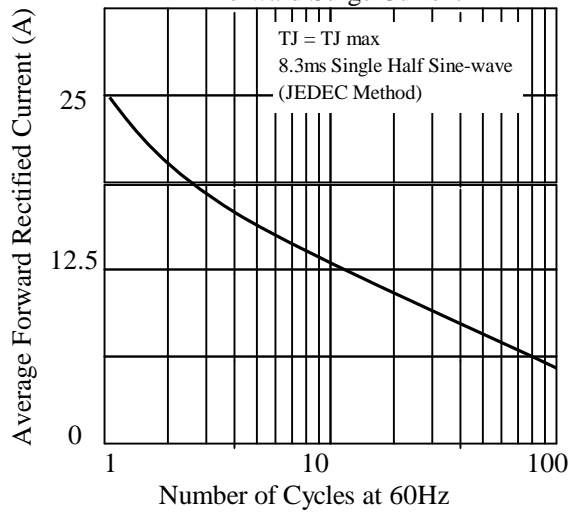


Fig 3. - Typical Instantaneous Forward Characteristics

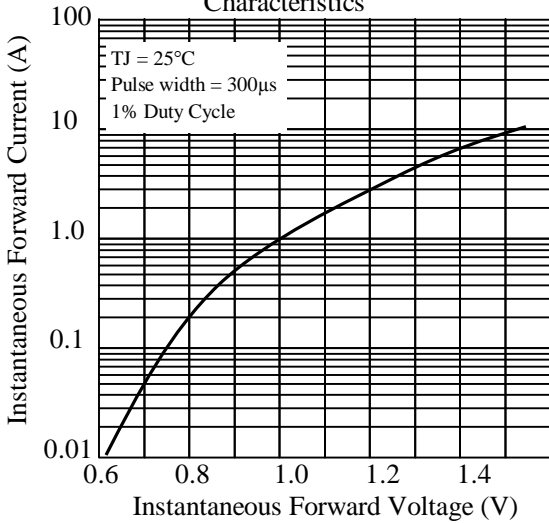


Fig 4. - Typical Reverse Characteristics

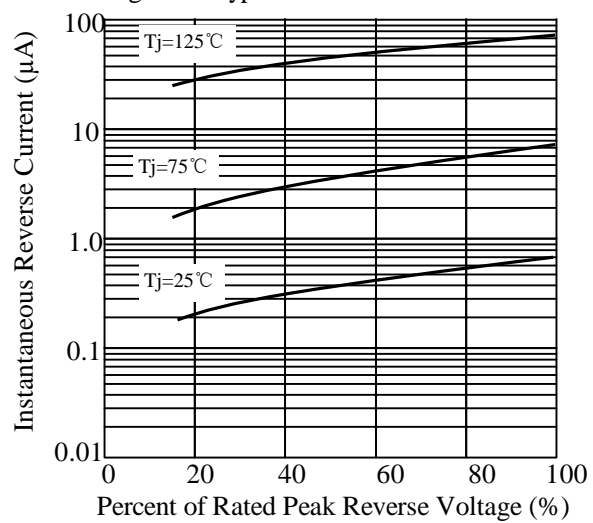


Fig 5. - typical transient thermal impedance

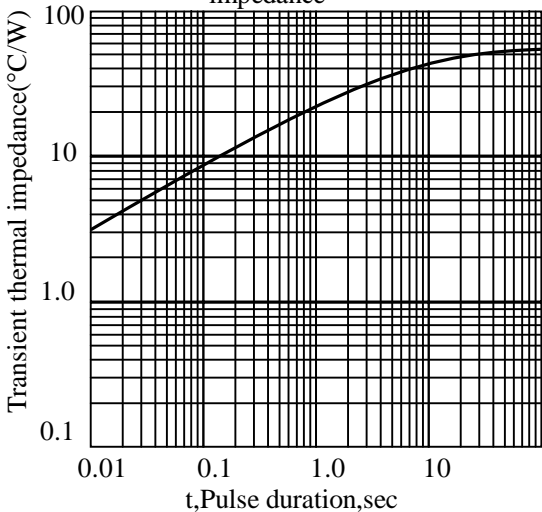
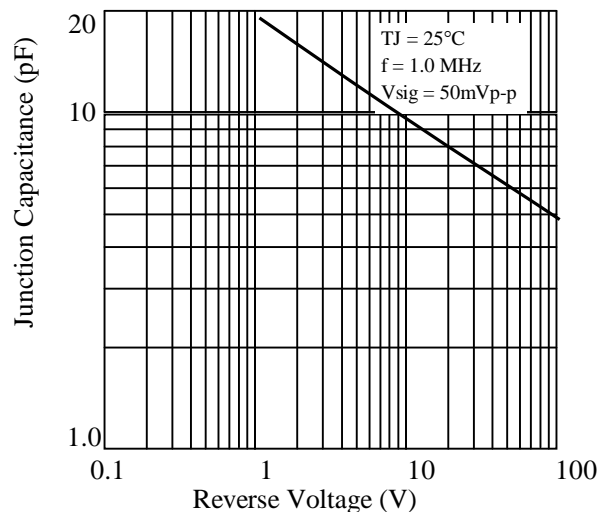
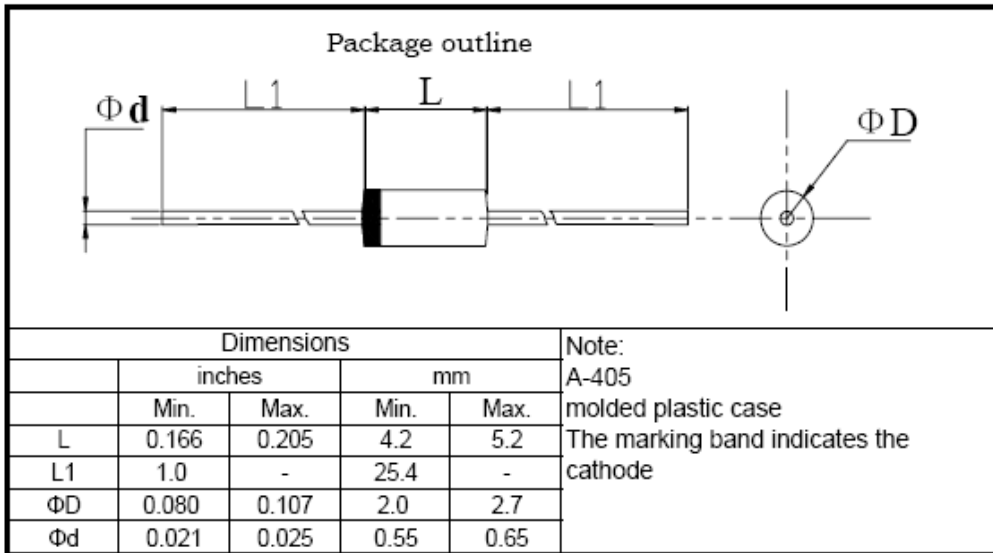


Fig 6. - Typical Junction Capacitance



EG01CS

3. dimension:



EG01CS

5、版式次更新记录

版次	更新记录	更新作者	更新日期
1	第一版	周杰	2010.06.04