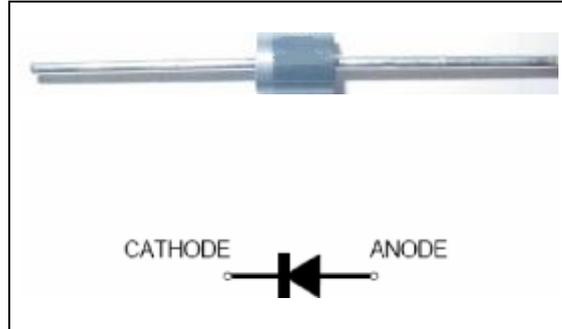


## High Efficiency Rectifiers Reverse Voltage 50 to 1000V Forward Current 1.0A

### Feature & Dimensions

- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* High temperature metallurgically bonded construction
- \* Capable of meeting environmental standards of MIL-S-19500
- \* 1.0 A operation at TA=55°C with no thermal runaway
- \* For use in high frequency rectifier circuits
- \* Fast switching for high efficiency
- \* Typical IR less than 1.0μA
- \* 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:** 0.007 oz., 0.20 g  
**Handling precaution:** None

### 1. Electrical Characteristic

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

Parameter Symbol	symbol	1H1	1H2	1H3	1H4	1H5	1H6	1H7	1H8	Unit
device marking code		1H1	1H2	1H3	1H4	1H5	1H6	1H7	1H8	
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	300	400	600	800	1000	V
Maximum RSM voltage	$V_{RSM}$	35	70	140	210	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	300	400	600	800	1000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A = 55^\circ\text{C}$	$I_F(AV)$	1.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30								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)	$R_{\theta JA}$	55								°C/W
Operating junction and storage temperature range	$T_J, T_{STG}$	-50to +150								°C

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

Parameter Symbol	symbol	1H1	1H2	1H3	1H4	1H5	1H6	1H7	1H8	Unit	
Maximum instantaneous forward voltage at 1.0A	$V_F$	1			1.3		1.85			V	
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 100^\circ\text{C}$	$I_R$	5.0					200				μA
Typical reverse recovery time (Note 1)	$t_{rr}$	50					70			ns	
Typical junction capacitance at 4.0V, 1MHz	$C_J$	20					15			PF	

**NOTES:**

1.  $I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A$
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

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

Fig. 1 - Forward Current Derating Curve

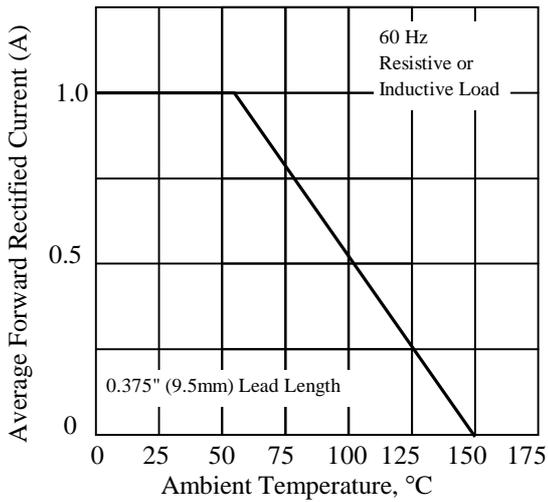


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

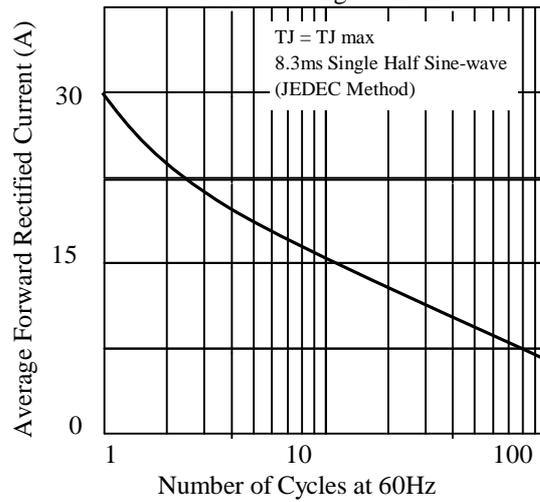


Fig 3. - Typical Instantaneous Forward Characteristics

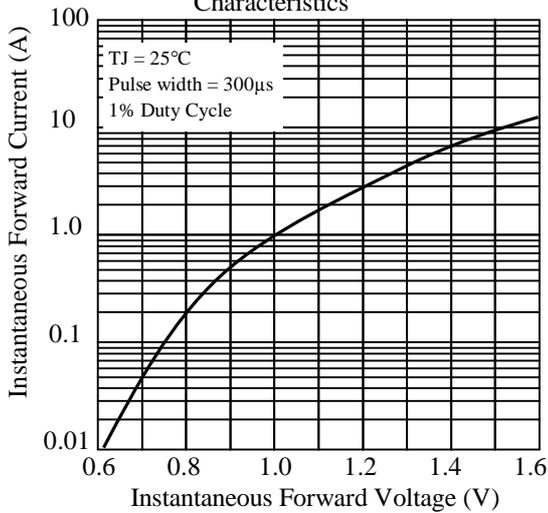


Fig 4. - Typical Reverse Characteristics

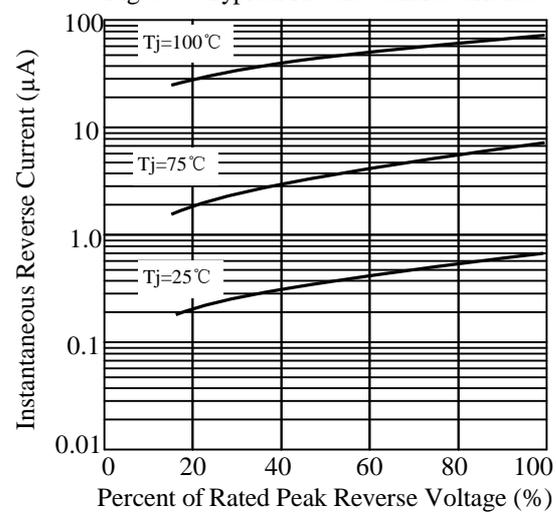


Fig 5. - typical transient thermal impedance

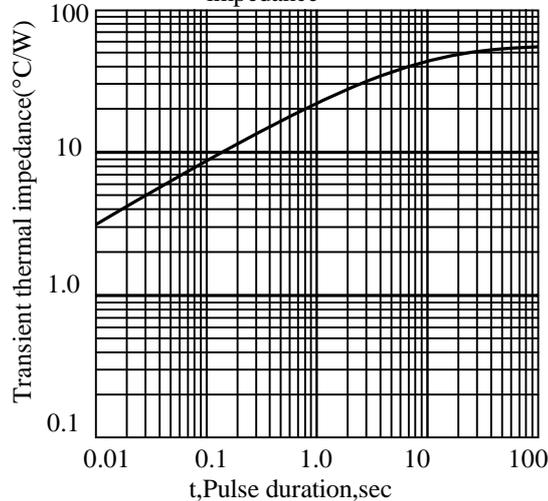
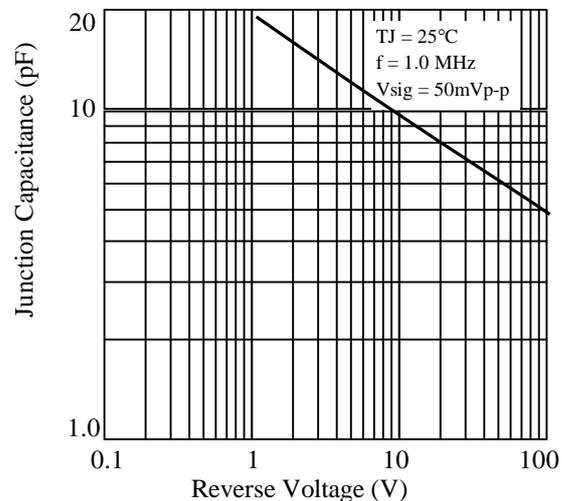


Fig 6. - Typical Junction Capacitance



### 3. dimension:

