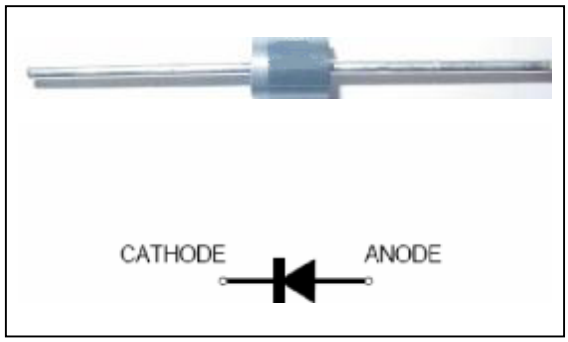
High Efficiency Rectifiers
Reverse Voltage 50 to 1000V Forward Current 1.0A

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 precautin: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°C	IF(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°C	IR(AV)	100								μA
Typical thermal resistance (Note 2)	RθJA	55								°C/W
Operating junction and storage temperature range	TJ, TSTG	–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 TA = 25°C at rated DC blocking voltage TA = 100°C	IR	5.0 200								μA
Typical reverse recovery time (Note 1)	trr	50					70			ns
Typical junction capacitance at 4.0V, 1MHz	CJ	20					15			PF

NOTES:
1. IF = 0.5A, IR = 1.0A, IRR = 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

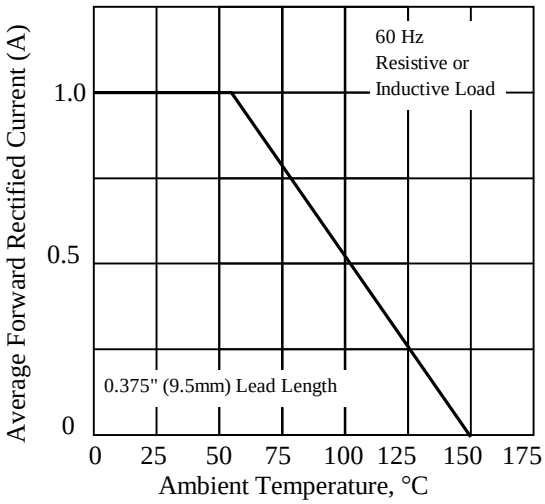


Fig. 2 – Maximum Non-repetitive Peak Forward Surge Current

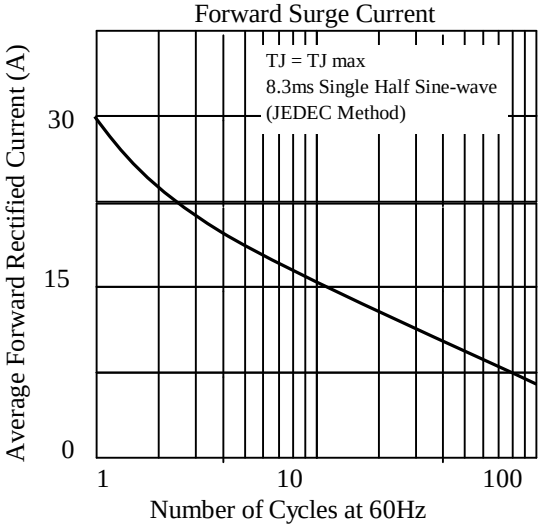


Fig 3. – Typical Instantaneous Forward Characteristics

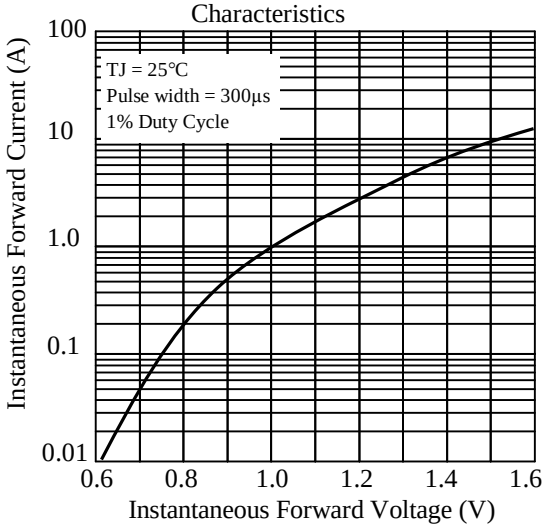


Fig 4. – Typical Reverse Characteristics

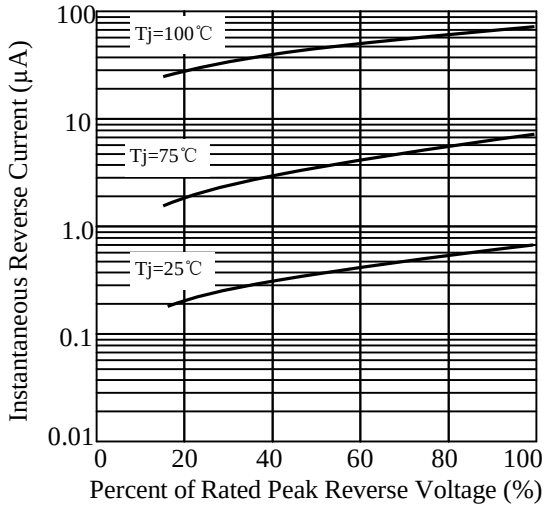


Fig 5. – typical transient thermal impedance

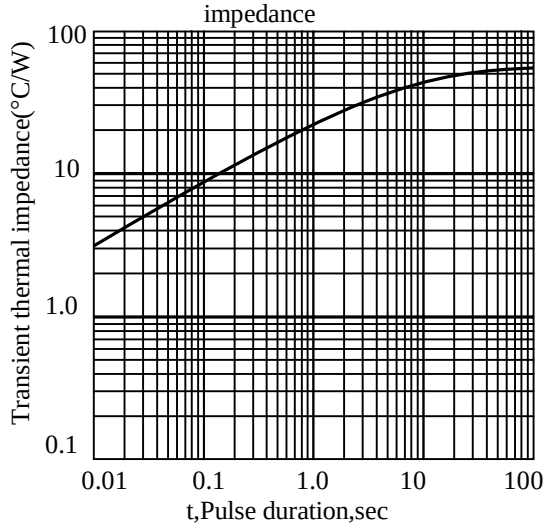
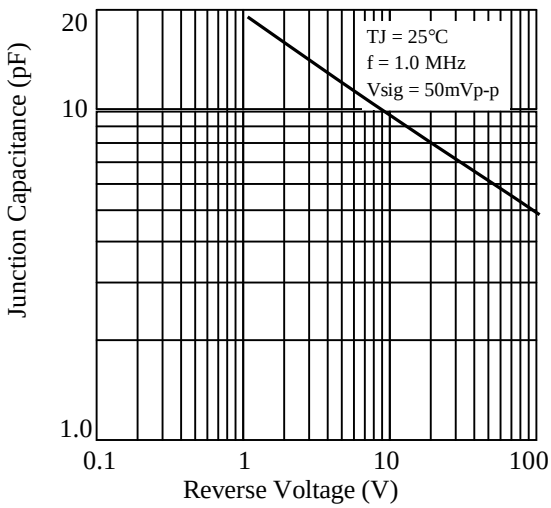
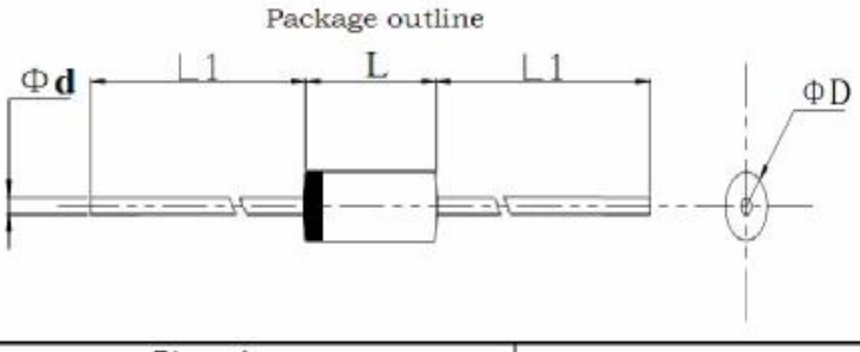


Fig 6. – Typical Junction Capacitance



3. dimension:



Dimensions					Note:
	inches		mm		R-1
	Min.	Max.	Min.	Max.	molded plastic case
L	0.106	0.126	2.7	3.2	The marking band indicates the
L1	0.787	-	20.0	-	cathode
ΦD	0.091	0.102	2.3	2.6	
Φd	0.021	0.025	0.55	0.65	