

**Glass Passivated High Efficient Rectifier**
**R-1**

**Features**

- ROHS compliant
- Glass passivated chip
- High forward surge capability
- Meet MSL level 1, per J-STD-020  
LF maximum peak of 250 °C
- Solder dip 260 °C / 40S
- Component in accordance to ROHS 2002/95/EC and WEEE 2002/96/WC
- UL recognition, file number E342874


**Primary characteristics**

$I_{F(AV)}$	1A
$V_{RRM}$	50V to 1000V
$I_{FSM}$	30A
$I_{RM}$	5 $\mu$ A
$V_{FM}$ at $I_F=1A$	1.0/1.3/1.7V
$T_J$ max.	150 °C

**Applications**

Ideal for ac-to-dc bridge full wave rectification such as SMPS, home appliances, office equipment, industrial automation applications

**Mechanical data**

- R-1
- Epoxy meets UL 94 V-0 flammability rating
- Terminals: Tin plated leads.
- Polarity: As marked.
- Mounting Torque: 10cm·kg(8.8 inches·lbs)max.
- Recommended Torque: 5.7 cm·kg(5 inches·lbs)

**Maximum rating (Ta=25°C unless otherwise noted)**

Parameter	Sym	R-1								Unit
		1H1 G	1H2 G	1H3 G	1H4 G	1H5 G	1H6 G	1H7 G	1H8 G	
Max. repetitive peak reverse voltage	$V_{RRM}$	50	100	200	300	400	600	800	1000	V
Max. RMS reverse voltage	$V_{RMS}$	35	70	140	210	280	420	560	700	V
Max. DC blocking voltage	$V_{DC}$	50	100	200	300	400	600	800	1000	V
Max. average forward current	$I_{F(AV)}$	1								A
Non-repetitive peak forward surge current 8.3ms single half-sine-wave	$I_{FSM}$	30								A
Max. instantaneous forward voltage drop per diode	$V_{FM}$	1.0			1.3		1.7			V
Max. instantaneous reverse current at rated DC blocking voltage	$I_{RM}$	5								$\mu$ A
		100								
Operating junction temperature	$T_J$	-55 ~ +150								°C
Storage temperature	$T_{STG}$	-55 ~ +150								°C
Maximum reverse recovery time (Note1)	trr	50					75			nS

**Notes:**

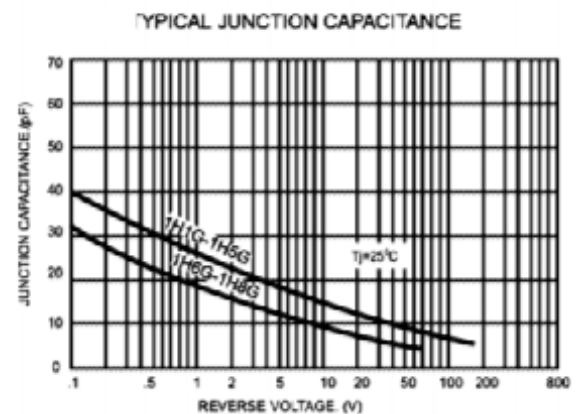
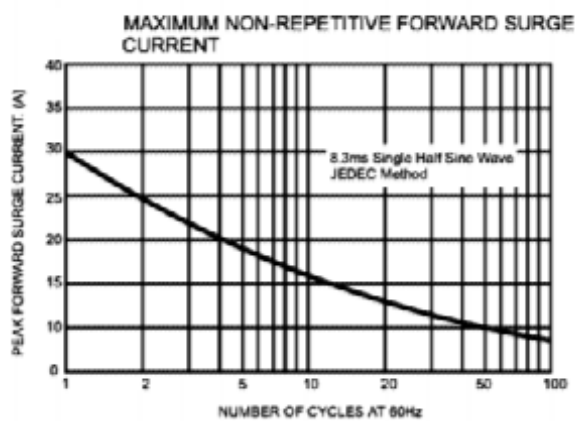
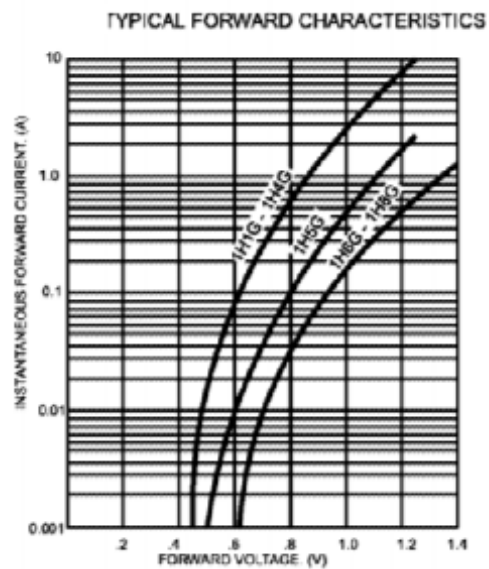
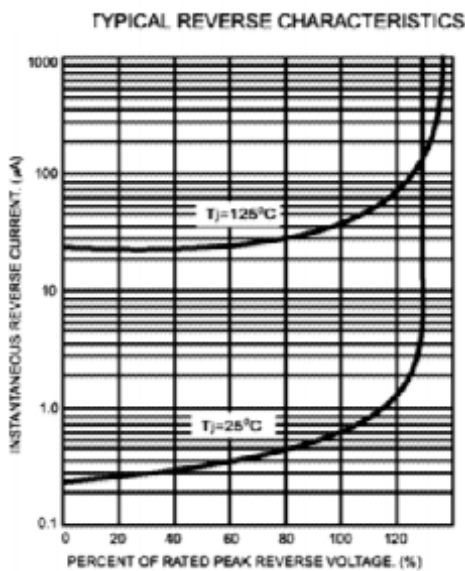
1 Reverse Recovery Test Conditions:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $IRR=0.25A$



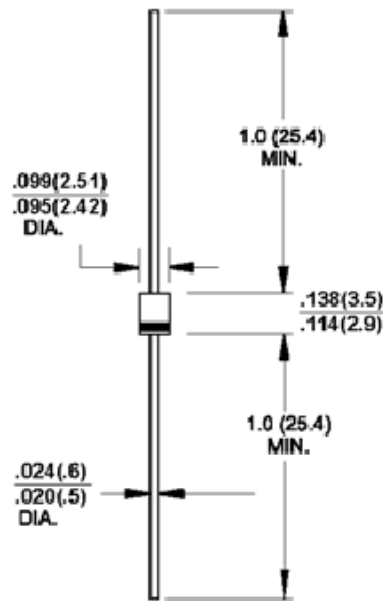
Ordering information (Example)

PREFERRED	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
1H8G				

Typical characteristics



Package outline dimensions



Dimensions in inches and (millimeters)

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