



# High Voltage, Fast Recovery Medium Current Rectifier H1601 Series

Platinum Doped  
Uniform Chip-to-Chip Recovery  
High Voltage  
Medium Current  
Fast  $t_{rr}$

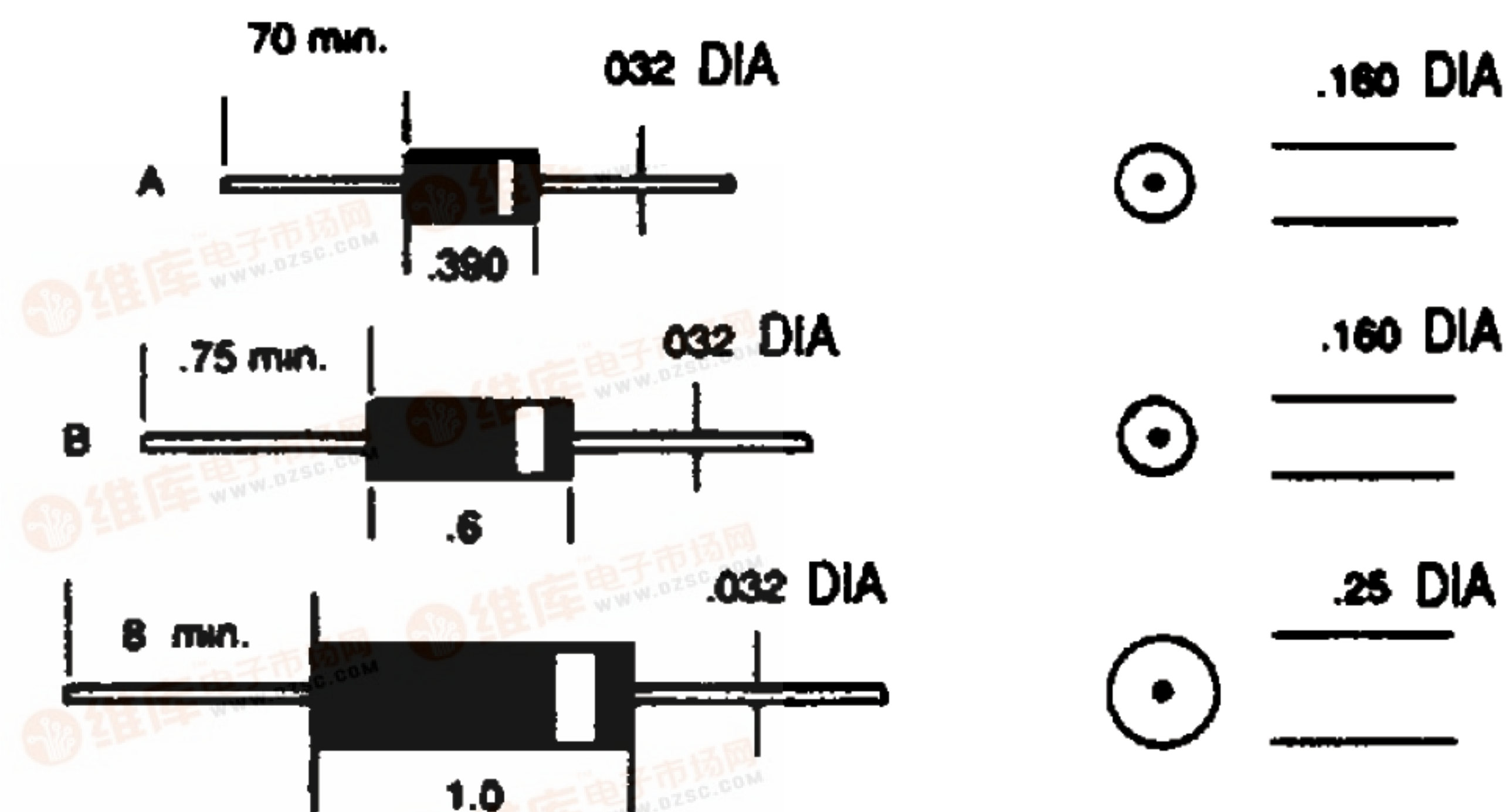
### MAXIMUM RATINGS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

MQSI Part No.	Package Style	Repetitive Peak Reverse Voltage $V_{RRM}$	Average Forward Current (Fig. 1) $I_{F(AV)}$	RMS Forward Current $I_{F(RMS)}$	Non-Repetitive Peak Surge Current $I_{FSM}$ 1/2 Cycle @ 60 Hz	Forward Voltage @ $I_F = 100\text{mA}$ $V_F$
H1601-1	A	1.0KV	400mA	625mA	35A	4V
H1601-1.5	A	1.5KV	400mA	625mA	35A	4V
H1601-2	A	2.0KV	250mA	390mA	30A	7V
H1601-3	A	3.0KV	250mA	390mA	30A	7V
H1601-4	A	4.0KV	170mA	265mA	25A	10V
H1601-5	A	5.0KV	170mA	265mA	25A	10V
H1601-6	B	6.0KV	130mA	200mA	20A	16V
H1601-8	B	8.0KV	130mA	200mA	20A	16V
H1601-10	B	10.0KV	100mA	155mA	15A	20V
H1601-12	B	12.0KV	100mA	155mA	15A	20V
H1601-15	C	15.0KV	70mA	110mA	10A	30V
H1601-18	C	18.0KV	70mA	110mA	10A	30V

### ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

	SYMBOL		UNITS
Maximum DC Reverse current at rated $V_{RRM}$	$I_R$	1	$\mu\text{A}$
Maximum DC Reverse Current at 80% rated $V_{RRM}$ 100°C	$I_R$	10	$\mu\text{A}$
Maximum Reverse Recovery Time At $I_F = 50\text{mA}$ , $I_R = 100\text{mA}$ , and $I_{RR} = -25\text{mA}$ (Fig. 2)	$t_{rr}$	250	nsec
Ambient Operating Temperature	$T_A$	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 55 to + 150	$^\circ\text{C}$

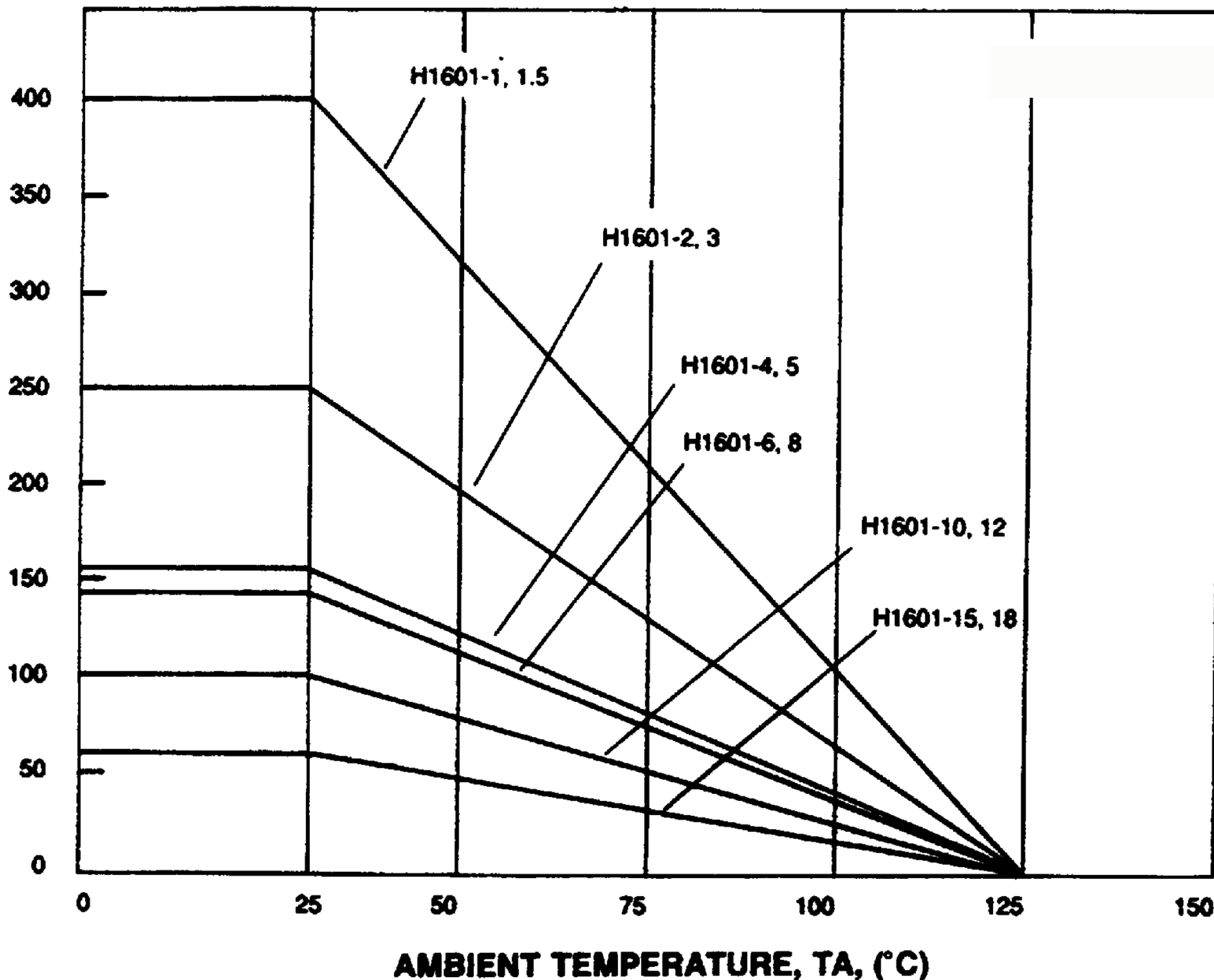
### DIMENSIONS IN INCHES



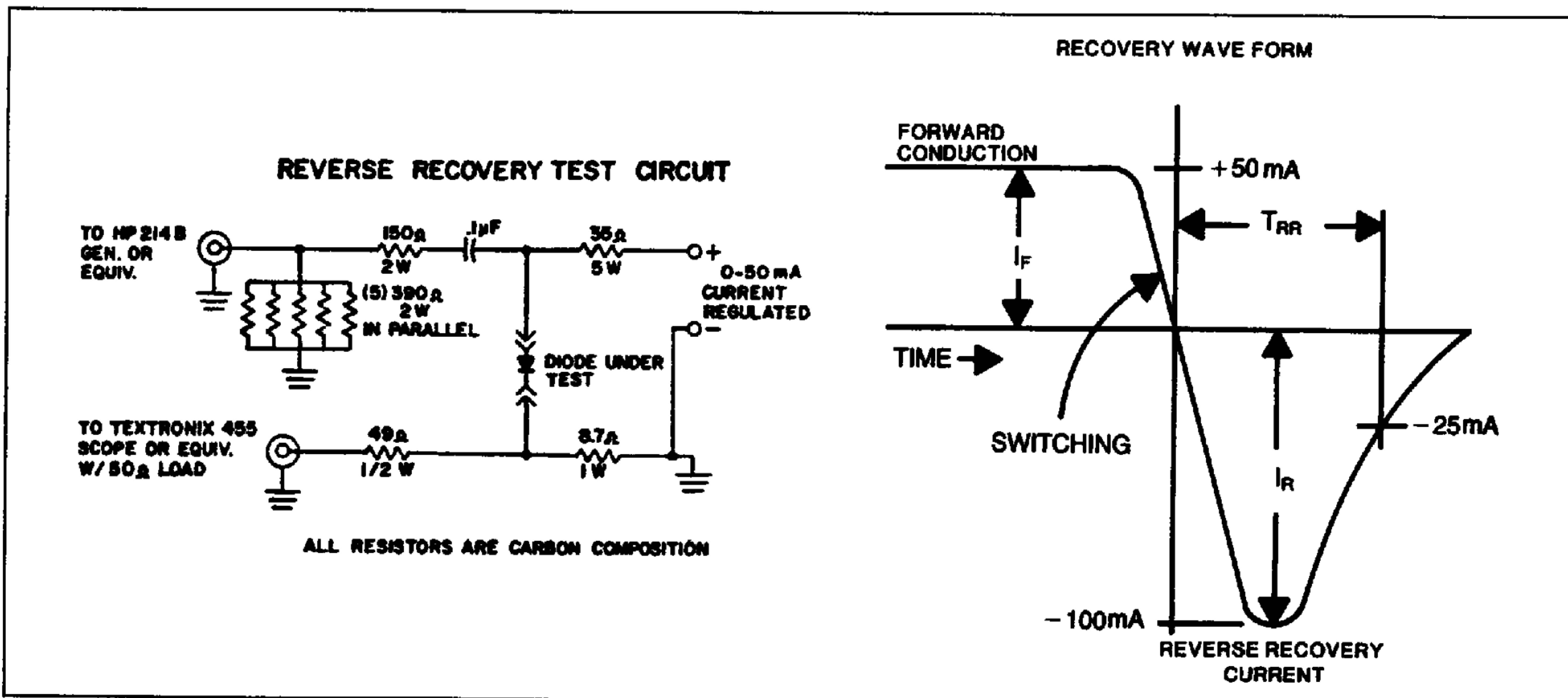
The rectifier as packaged can be tested in air ( $25^\circ\text{C}$ ,  $< 55\% \text{RH}$ ) at rated  $V_{RRM}$ . However, in a dusty or humid environment, the rectifier should be overmolded or operated in oil or a gaseous dielectric to prevent corona or arcing. Dimensional tolerances in inches  $.X \pm .10"$ ,  $.XX \pm .02"$ ,  $.XXX \pm .005"$ .



**AVERAGE FORWARD CURRENT,  $I_{F(AV)}$  (mA)  
RESISTIVE LOAD, SINEWAVE**



**FIGURE 1**



**FIGURE 2**