Kingtronics®

W005 THRU W10

SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE 50 to 1000 Volts **FORWARD CURRENT** 1.5 Ampere

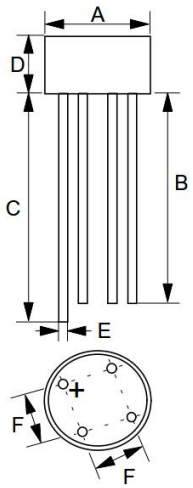
FEATURES

Rating to 1000VPRV.
Ideal for printed circuit board.
Low forward voltage drop, high current capability.
Reliable low cost construction utilizing molded epoxy technique results in inexpensive product.
The plastic material has UL flammability classification 94V-0.

MECHANICAL DATA

Case: Molded plastic.
Polarity: As marked on Body.
Weight: 0.05 ounces, 1.42grams.
Mounting position: Any.

WOB



WOB		
DIM.	MIN.	MAX.
A	8.90	9.30
B	25.4	–
C	27.9	–
D	5.10	5.60
E	0.70	0.80
F	4.60	5.60
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified ,
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load derate current by 20%

PARAMETER	SYMBOL	W005	W01	W02	W04	W06	W08	W10	UNIT
Maximum Recurrent Peak Revere Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @TA=25℃	$I_{(AV)}$	1.5							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							A
Maximum forward Voltage at 1.0A DC	VF	1.0							V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking Voltage @ T_J=125℃	I_R	50 500							uA
I^2t Rating for fusing (t < 8.3ms)	I^2t	10.4							A^2S
Typical Junction Capacitance per element (Note 1)	C_J	20							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	36							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

1- Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2- Thermal Resistance Junction to Ambient.

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RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

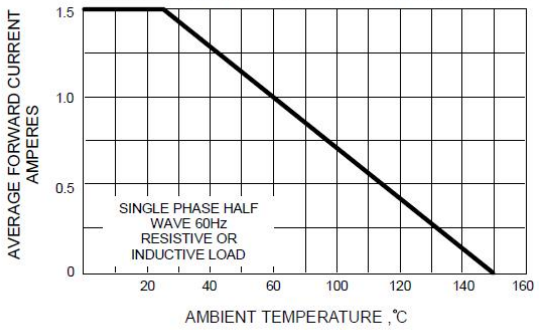


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

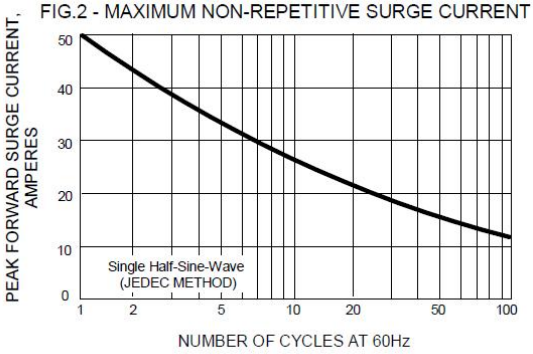


FIG.3 - TYPICAL JUNCTION CAPACITANCE

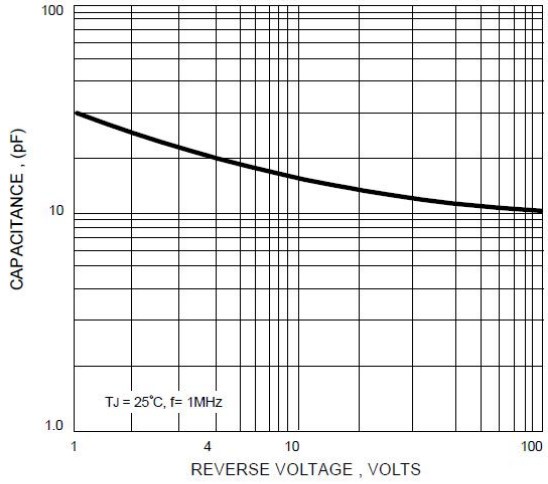


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

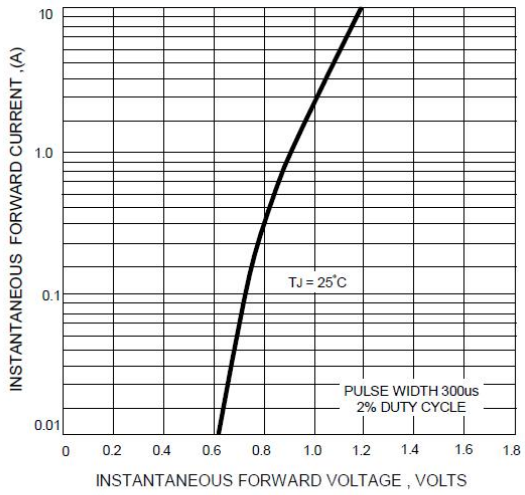
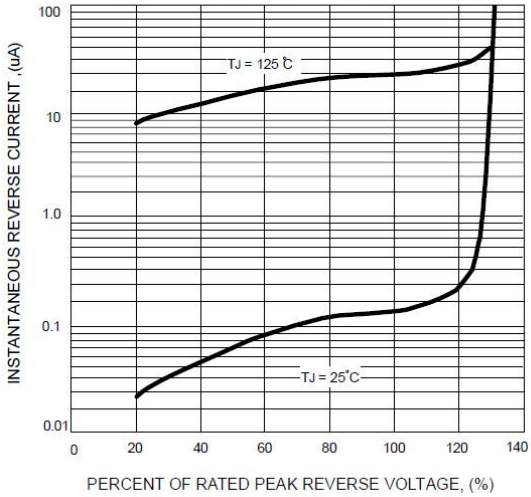


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice.