America Semiconductor

Silicon Bridge Rectifier

2W005M thru 2W04M

V_{RRM} = 50 V - 1000 V

I_F =2 A

Features

- Types up to 1000 V V_{RRM}
- Ideal for printed circuit board
- Low forward voltage drop
- High temperature soldering guaranteed: 250^{0}C/ 10 seconds, 0.375" lead length, .5 lbs (2.3kg) tension
- Low leakage current

WOM Package

Mechanical Data

Case: Plastic

Polarity: Color band on body denotes cathode

Mounting position: Any

Terminals: Plated leads, solderable per MIL-STD-202 Method 208 guaranteed

Weight: 1.1 grams

Maximum ratings, at T_j = 25 °C, unless otherwise specified (2WXXM rectifiers have shorter leads than 2WXXG)

Parameter	Symbol	Conditions	2W005M	2W01M	2W02M	2W04M	Unit
Repetitive peak reverse voltage	V_{RRM}		50	100	200	400	V
RMS reverse voltage	V_{RMS}		35	70	140	280	V
DC blocking voltage	V_{DC}		50	100	200	400	V
Continuous forward current	I_F	$T_C \leq 50$ °C	2	2	2	2	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	T_C = 25 °C, t_p = 8.3 ms	60	60	60	60	A
Operating temperature	T_j		-65 to 125	-65 to 125	-65 to 125	-65 to 125	°C
Storage temperature	T_{stg}		-65 to 150	-65 to 150	-65 to 150	-65 to 150	°C

Electrical characteristics, at Tj = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	2W005M	2W01M	2W02M	2W04M	Unit
Diode forward voltage	V_F	I_F = 2 A, T_j = 25 °C	1.1	1.1	1.1	1.1	V
Reverse current	I_R	V_R = 50 V, T_j = 25 °C V_R = 50 V, T_j = 100 °C	10 500	10 500	10 500	10 500	µA

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

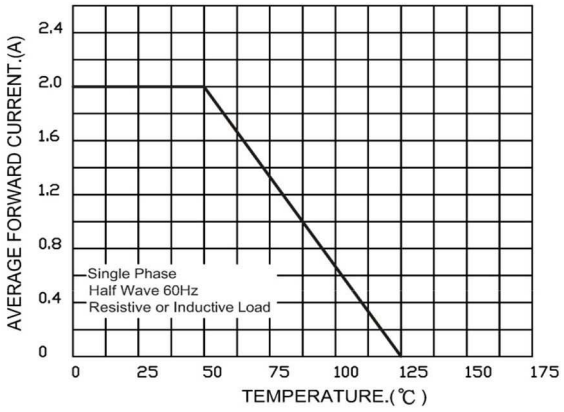

FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

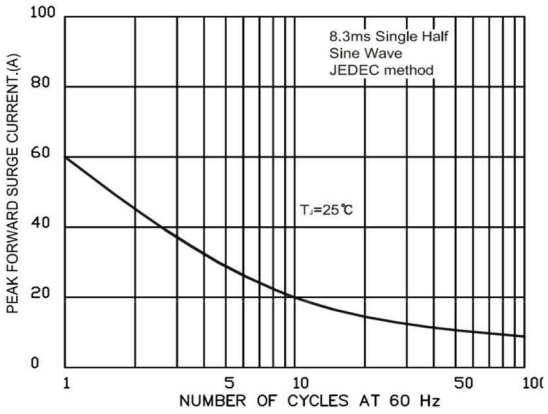

FIG.3-TYPICAL FORWARD CHARACTERISTICS

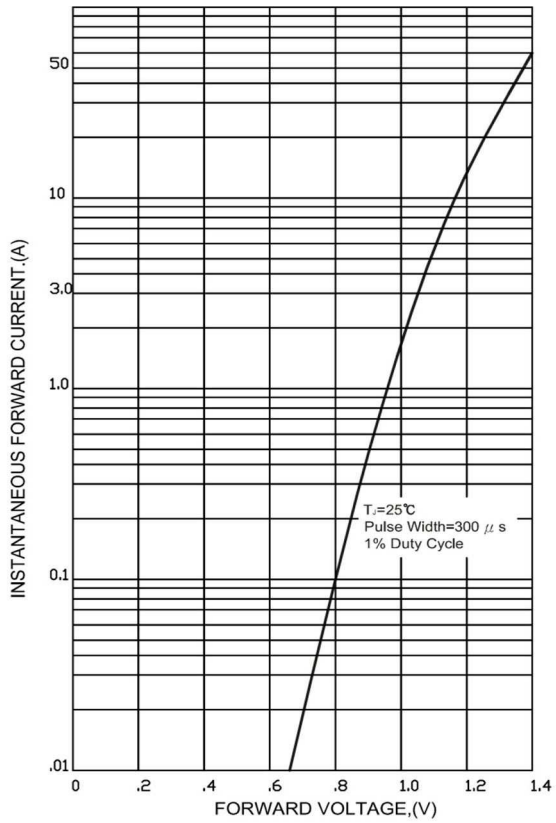

FIG.4-TYPICAL REVERSE CHARACTERISTICS