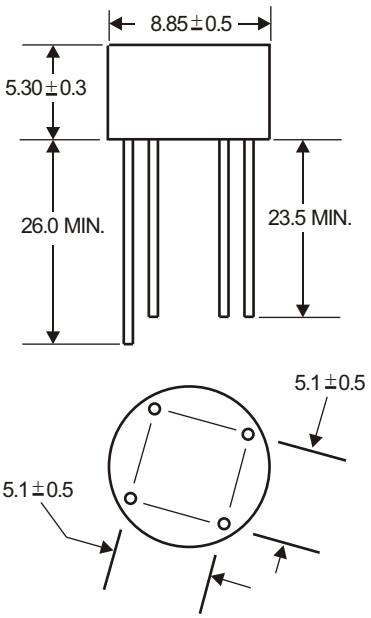
SEP ELECTRONIC CORP.

2W005 thru 2W10

2.0 A Single-Phase Silicon Bridge Rectifier

Rectifier Reverse Voltage 50 to 1000V

WOB



Dimensions in millimeters(1mm =0.0394")

Features

- This series is UL listed under the Recognized Component Index, file number E142814
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Ideal for printed circuit board mounting
- High surge current capability
- High temperature soldering guaranteed 265°C /10 seconds at 5 lbs (2.3kg) tension

Mechanical Data

Case: Reliable low cost construction utilizing molded plastic technique
Terminals: Plated leads solderable per MIL-STD-202, Method 208
Mounting Position: Any
Weight: 0.05 ounce, 1.3 grams (approx)

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
For Capacitive load derate current by 20%.

Parameter	Symbol	2W005	2W01	2W02	2W04	2W06	2W08	2W10	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at TA=25°C	IF(AV)	2.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	60							A
Rating for fusing (t<8.3ms)	I^2t	15							A^2sec
Typical thermal resistance per element (1)	RthJA	50.0							°C / W
Typical junction capacitance per element (2)	Cj	30							pF
Operating junction and storage temperature range	TJ, TSTG	-55 to + 150							°C

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
For Capacitive load derate by 20 %.

Parameter	Symbol	2W005	2W01	2W02	2W04	2W06	2W08	2W10	Unit
Maximum instantaneous forward voltage drop per leg at 2.0A	VF	1.1							V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =100°C	IR	10 1000							μA

Notes: (1)Thermal resistance from Junction to Ambemt on P.C.board mounting.
(2)Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

Rating and Characteristic Curves (TA=25 °C Unless otherwise noted)
2W005 thru 2W10

Fig. 1 Derating Curve for Output Rectified Current

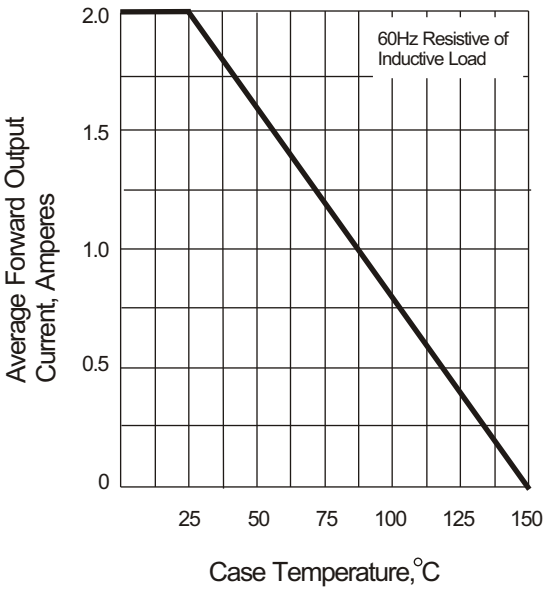


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

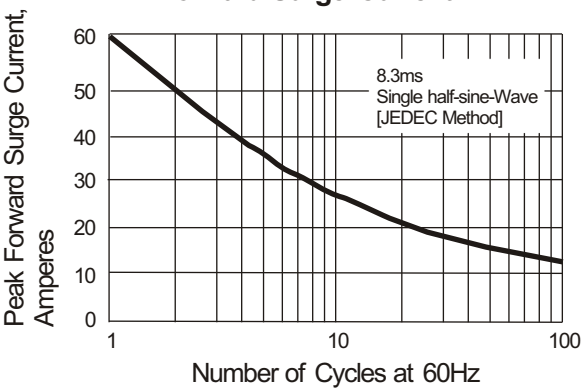


Fig. 3 Typical Instantaneous Forward Characteristics

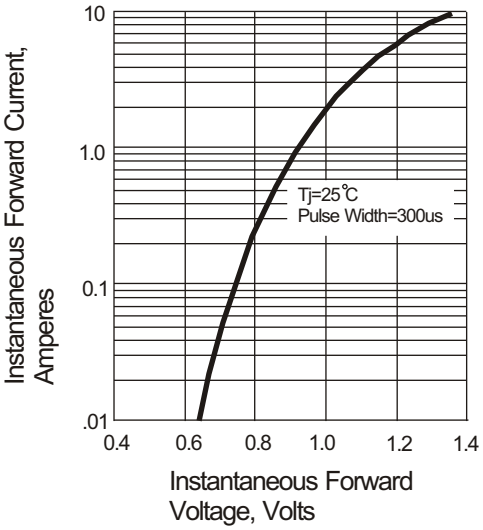


Fig. 4 Typical Reverse Characteristics

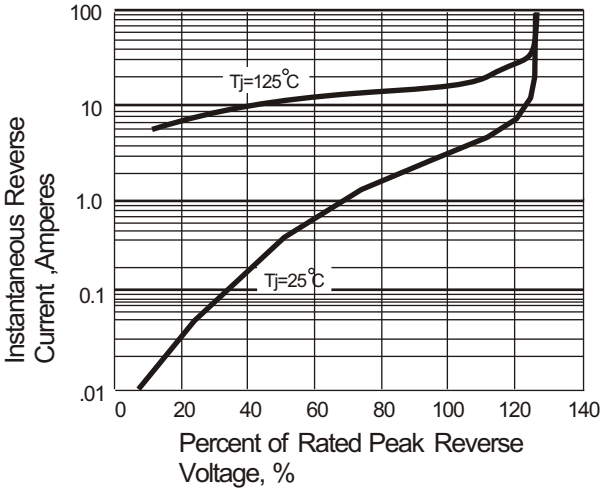


Fig. 5 Typical Junction Capacitance