

Glass Passivated Bridge Rectifier

Voltage

1000 V

Current

4A

Features

- UL recognition file number E228882
- Ideal for printed circuit boards
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case : KBP Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0536 ounces, 1.52 grams

Application

- USB PD & NB Adapter(<45W)
- Monitor power adapter (<100W)
- General Adapter (<100W)

KBP



Maximum Ratings and Thermal Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS Voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Maximum Average Forward Current	$I_{F(AV)}$	4	A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25^\circ\text{C}$ @ $T_A = 125^\circ\text{C}$ I_{FSM}	75 60	A
Peak Forward Surge Current : 1.0 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25^\circ\text{C}$ @ $T_A = 125^\circ\text{C}$ I_{FSM}	150 120	A
$I^2 t$ rating for fusing ($t = 8.3\text{ms}$)	$I^2 t$	23.3	A^2S
Typical Junction Capacitance Measured at 1 MHZ And Applied $V_R = 4\text{ V}$	C_J	50	pF
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	40	$^\circ\text{C/W}$
(Note 2)	$R_{\theta JC}$	12	
Operating Junction Temperature Range	T_J	-55~150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55~150	$^\circ\text{C}$

Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_F	$I_F = 4\text{ A}$, $T_J = 25^\circ\text{C}$	-	-	1.1	V
Reverse Current	I_R	$V_R = 1000\text{ V}$, $T_J = 25^\circ\text{C}$	-	-	5	μA
		$V_R = 1000\text{ V}$, $T_J = 125^\circ\text{C}$	-	-	500	

NOTES :

1. Mounted on a FR4 PCB standard pad
2. Thermal Resistance Junction to Case, Lead and Ambient

TYPICAL CHARACTERISTIC CURVES

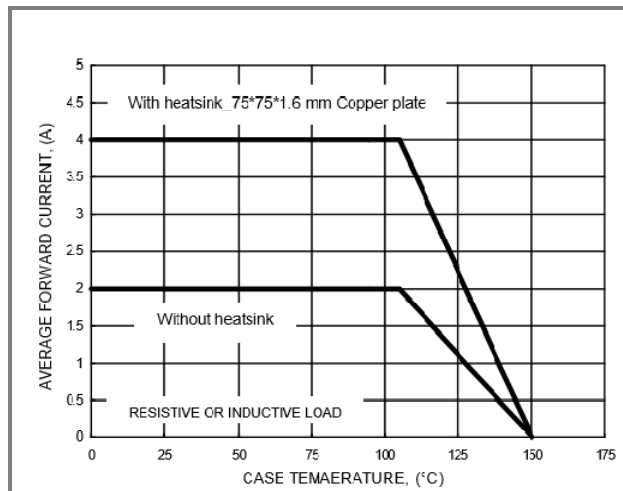


Fig.1 Forward Current Derating Curve

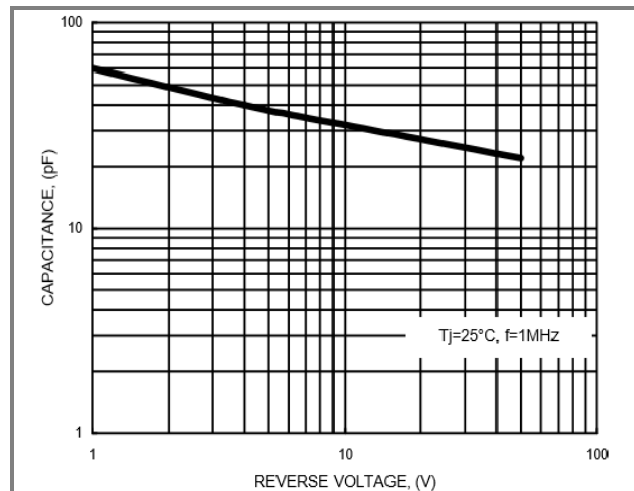


Fig.2 Typical Junction Capacitance

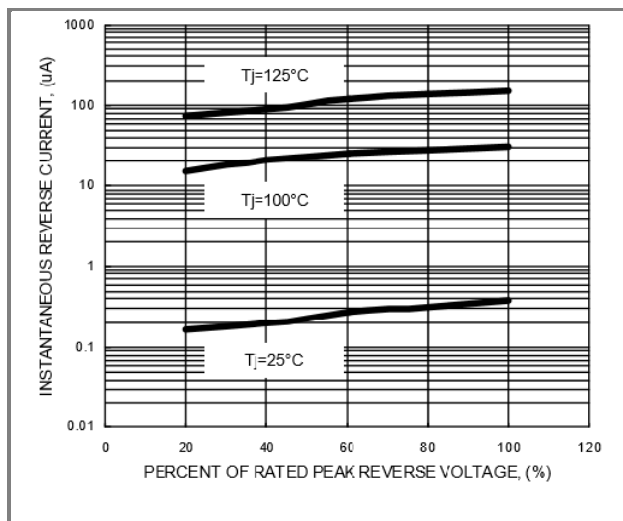


Fig.3 Typical Reverse Characteristics

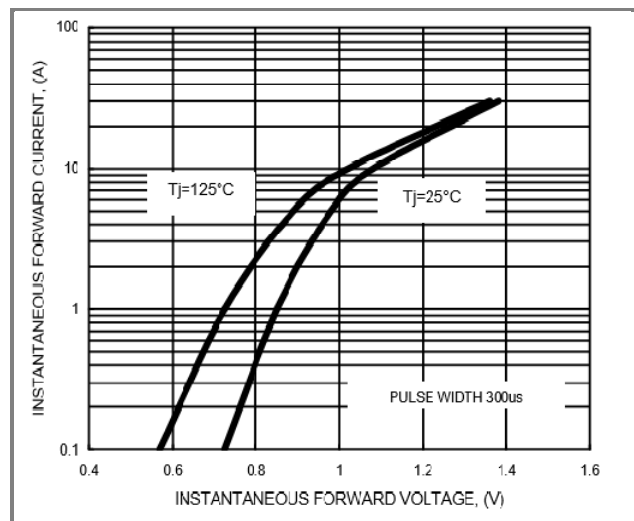
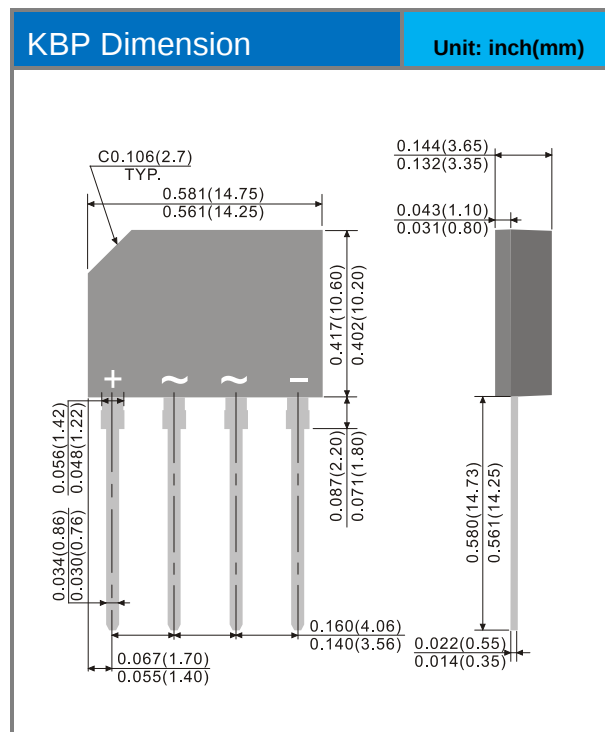


Fig.4 Typical Forward Characteristics

Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking
KBP4M_B0_00101	KBP	500 pcs / Box	KBP4M

Packaging Information



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