

## General Purpose Rectifier

**Voltage**

**1000 V**

**Current**

**2A**

### Features

- Glass passivated chip junction
- Low forward voltage drop
- Low leakage current
- 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** ( $T_A = 25\text{ }^\circ\text{C}$  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	$I_{F(AV)}$	2	A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25\text{ }^\circ\text{C}$ @ $T_A = 125\text{ }^\circ\text{C}$ $I_{FSM}$	75 60	A
Peak Forward Surge Current : 1.0 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25\text{ }^\circ\text{C}$ @ $T_A = 125\text{ }^\circ\text{C}$ $I_{FSM}$	150 120	A
$I^2 t$ rating for fusing ( $t = 8.3\text{ms}$ )	$I^2 t$	23.3	A <sup>2</sup> S
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** ( $T_A = 25\text{ }^\circ\text{C}$  unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	$V_F$	$I_F = 2\text{ A}, T_J = 25\text{ }^\circ\text{C}$	-	-	1.1	V
Reverse Current	$I_R$	$V_R = 1000\text{ V}, T_J = 25\text{ }^\circ\text{C}$	-	-	5	uA
		$V_R = 1000\text{ V}, T_J = 125\text{ }^\circ\text{C}$	-	-	100	

NOTES :

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

TYPICAL CHARACTERISTIC CURVES

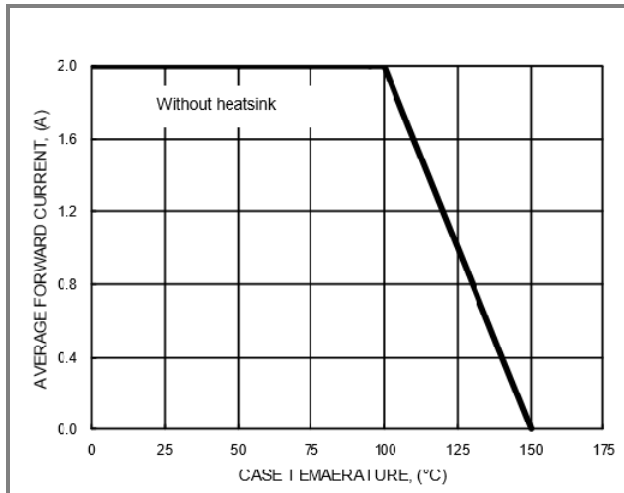


Fig.1 Forward Current Derating Curve

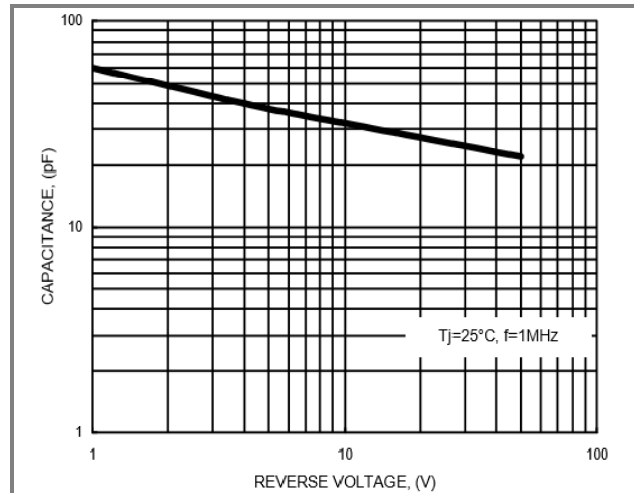


Fig.2 Typical Junction Capacitance

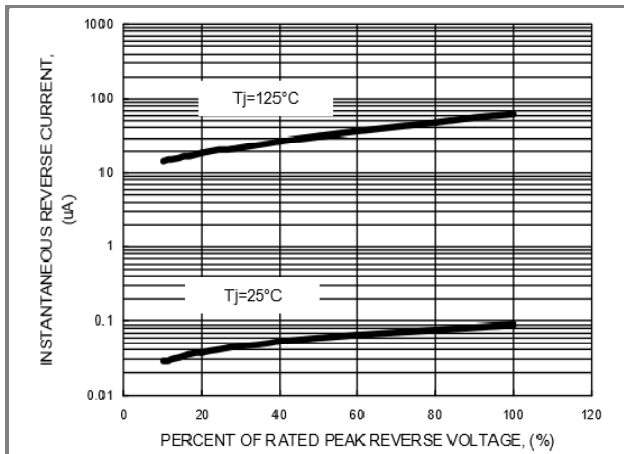


Fig.3 Typical Reverse Characteristics

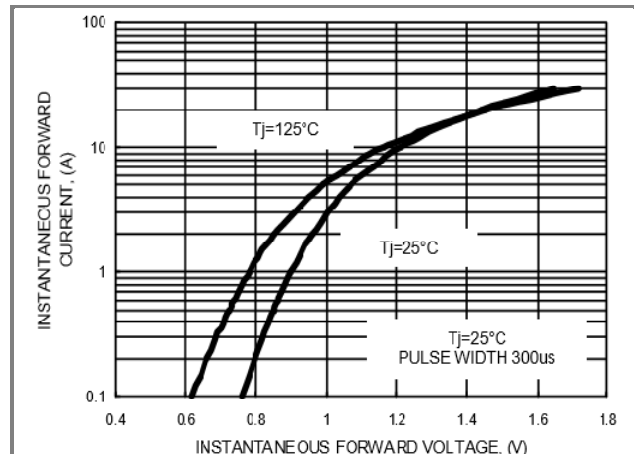
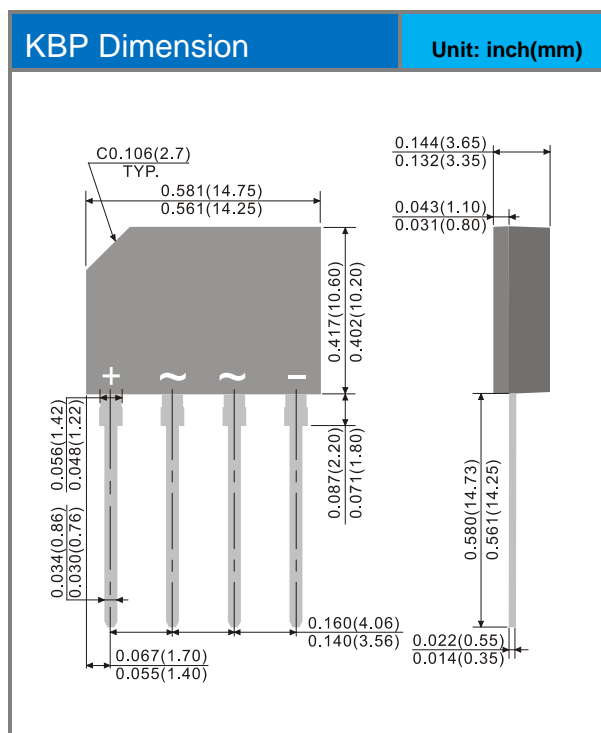


Fig.4 Typical Forward Characteristics

**Part No. Packing Code Version**

Part No. Packing Code	Package Type	Packing Type	Marking
KBP2MI_T0_00101	KBP	35 pcs / tube	KBP2MI

**Packaging Information**



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