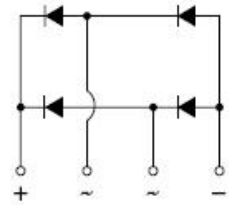
SFKBP2D-SFKBP2J

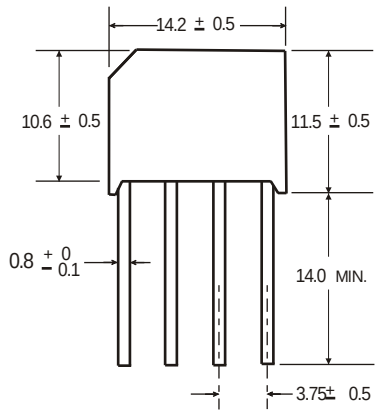
2A, 200V - 600V Ultrafast Glass Passivated Bridge Rectifiers

Features

KBP

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High surge current capability
- Ideal for printed circuit boards
- Ultrafast reverse recovery time for high frequency





Dimensions in millimeters

Mechanical Data

- Case: Molded plastic body over passivated junctions
- Terminals: Solderable per MIL-STD-202, method 208
- Polarity: As marked on body
- Mounting position: Any
- Weight: 0.06 ounce, 1.7 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)					
PARAMETER	SYMBOL	SFKBP2D	SFKBP2G	SFKBP2J	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	V
Maximum RMS voltage	V_{RMS}	140	280	420	V
Maximum DC blocking voltage	V_{DC}	200	400	600	V
Maximum average forward rectified current	$I_{F(AV)}$	2.0			A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	60			A
Rating for fusing (t<8.3ms)	I^2t	6.64			A^2s
Maximum instantaneous forward voltage (Note 1) I_F= 2 A	V_F	0.95	1.20	1.70	V
Maximum reverse current @ rated V_R T_J=25°C T_J=125°C	I_R	1 200			μA
Maximum reverse recovery time (Note 2)	t_{rr}	35			ns
Typical thermal resistance	$R_{\theta JL}$ $R_{\theta JA}$	25 80			°C/W
Operating junction temperature range	T_J	- 55 to +150			°C
Storage temperature range	T_{STG}	- 55 to +150			°C

Note 1: Pulse test with PW=300μs, 1% duty cycle

Note 2: Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

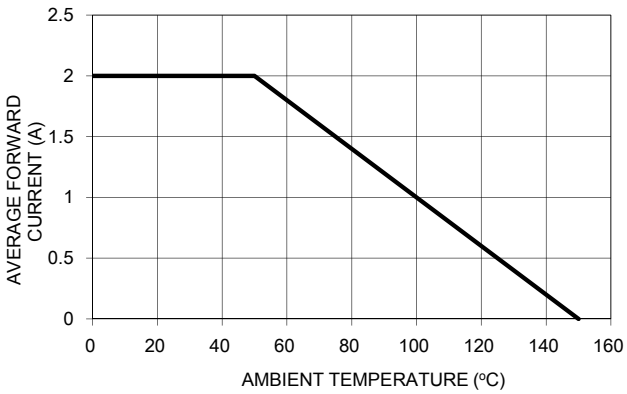


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

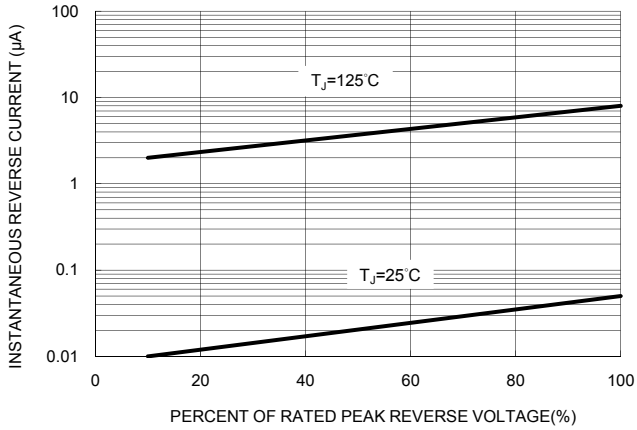


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

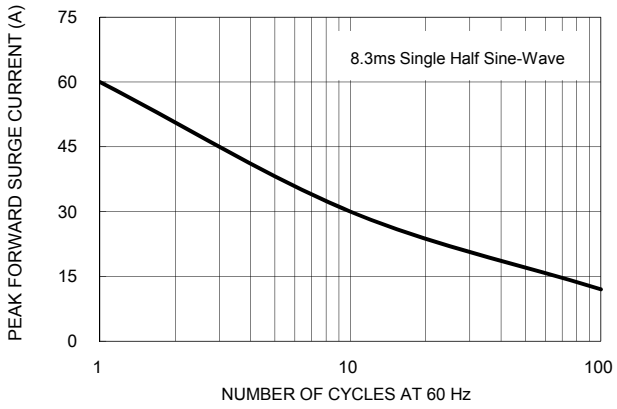


FIG. 4 TYPICAL FORWARD CHARACTERISTICS