

D3K Plastic-Encapsulate Bridge Rectifier

Features

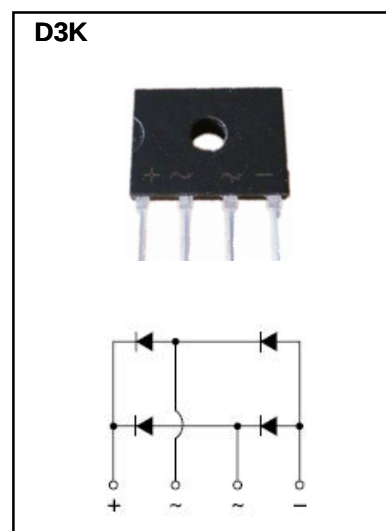
- I_O 3.0A
- V_{RRM} 50V-1000V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- General purpose 1 phase Bridge rectifier applications

Marking

- D3K BXX
- XX : From 005 To 10



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	D3KB						
				005	01	02	04	06	08	10
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
Average Rectified Output Current	I_O	A	60Hz sine wave, R-load	With heatsink $T_c=100^{\circ}\text{C}$						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz sine wave, 1 cycle, $T_j=25^{\circ}\text{C}$	3.0						
Current Squared Time	I^2t	A^2S	$1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^{\circ}\text{C}$, Rating of per diode	90						
Storage Temperature	T_{stg}	$^{\circ}\text{C}$		33						
Junction Temperature	T_j	$^{\circ}\text{C}$		-55 ~ +150						

Electrical Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	V_{FM}	V	$I_{FM}=3.0\text{A}$, Pulse measurement, Rating of per diode	1.1
Peak Reverse Current	I_{RRM}	μA	$V_{RM}=V_{RRM}$, Pulse measurement, Rating of per diode	10
Thermal Resistance	$R_{\theta J-A}$	$^{\circ}\text{C/W}$	Between junction and ambient, Without heatsink	34
	$R_{\theta J-L}$		Between junction and case, With heatsink	15

Typical Characteristics

FIG.1-FORWARD CURRENT DERATING CURVE

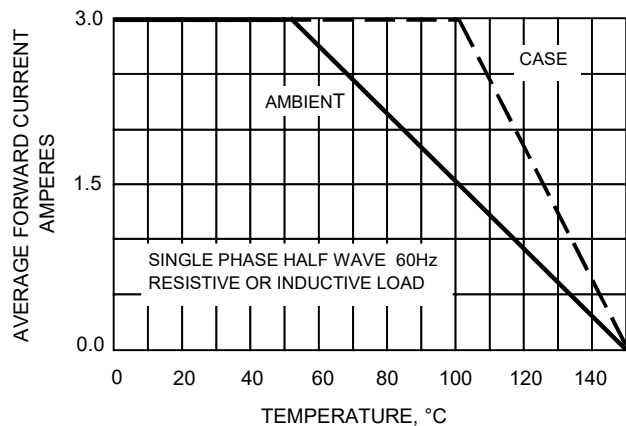


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

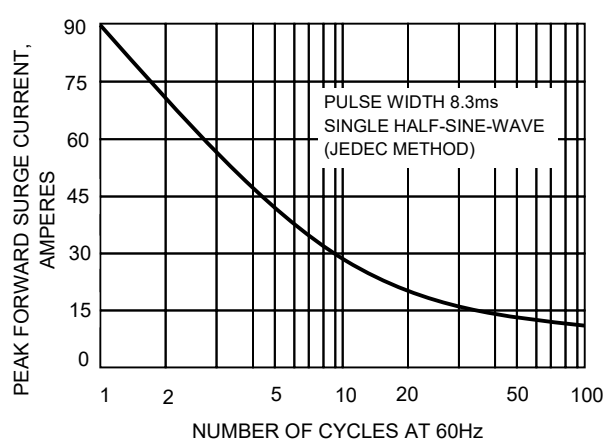


FIG.3-TYPICAL JUNCTION CAPACITANCE

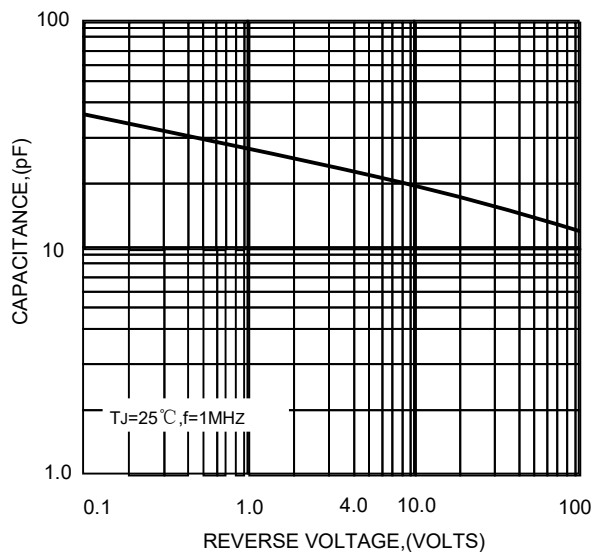


FIG.4-TYPICAL FORWARD CHARACTERISTICS

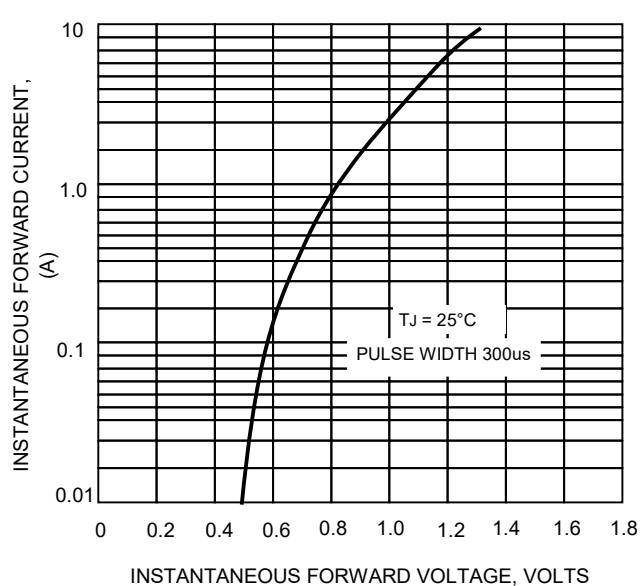
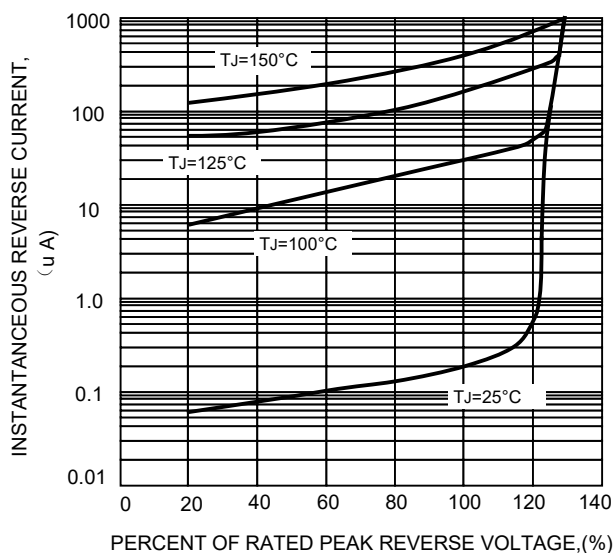
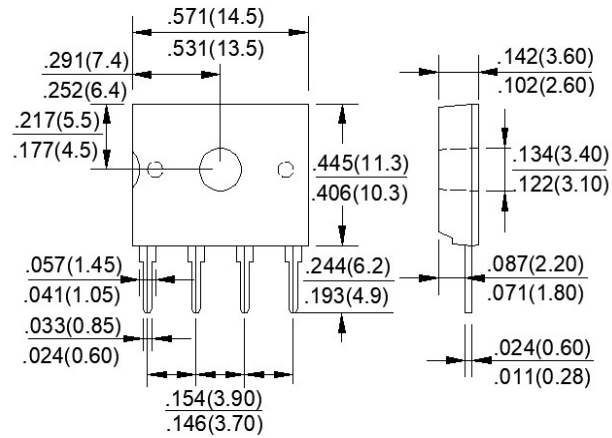


FIG.5-TYPICAL REVERSE CHARACTERISTICS



D3K Package Outline Dimensions



Dimensions in millimeters

NOTICE

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