

## D8KB6A THRU D8KB10A

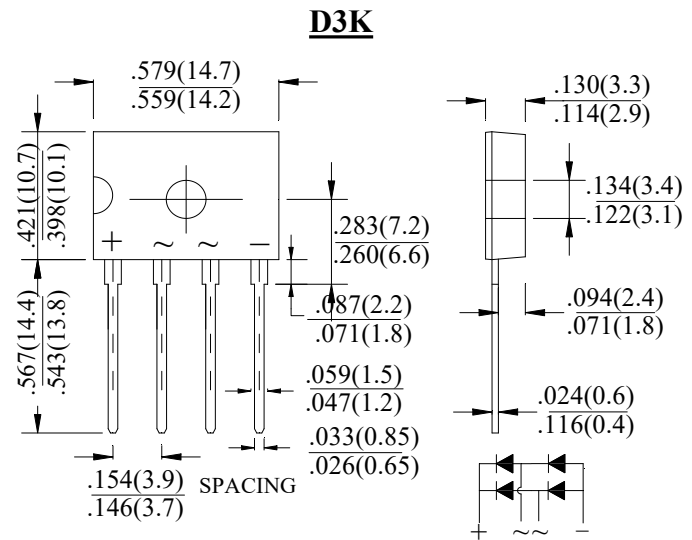
### SINGLE PHASE 8.0AMPS.GLASS PASSIVATED BRIDGE RECTIFIERS

#### FEATURE

- . UL Listed Under Recognized Component Index, File Number E338195
- . Glass passivated chip junctions
- . High case dielectric strength
- . Low Reverse Leakage Current
- . High surge current capability
- . Ideal for Printed Circuit Board Applications

#### MECHANICAL DATA

- . Case Material: Molded Plastic.  
UL Flammability Classification Rating 94V-0
- . Terminals: Pure tin plated, Lead free.  
Leads solderable per MIL-STD-750, Method 2026.
- . Polarity: Marked on body
- . Mounting position: Any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

Type Number	SYM BOL	D8KB6A	D8KB8A	D8KB10A	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	420	560	700	V
Maximum DC blocking Voltage	$V_{DC}$	600	800	1000	V
Maximum Average Forward (with heatsink Note2) Rectified Current @ $T_C=100^\circ\text{C}$ (without heatsink)	$I_{F(AV)}$		8.0 3.0		A
Peak Forward Surge Current @ $T_J=25^\circ\text{C}$ 8.3ms single half sine-wave @ $T_J=125^\circ\text{C}$	$I_{FSM}$		170 140		A
Peak Forward Surge Current @ $T_J=25^\circ\text{C}$ 1.0ms single half sine-wave @ $T_J=125^\circ\text{C}$	$I_{FSM}$		330 280		A
Maximum Forward Voltage @ 8.0A DC Drop per element @ 4.0 A DC	$V_F$		1.1 1.0		V
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ at rated DC blocking voltage @ $T_J=125^\circ\text{C}$	$I_R$		5.0 500.0		$\mu\text{A}$
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$		119		$\text{A}^2\text{Sec}$
Typical Junction Capacitance (Note 1)	$C_J$		50		pF
Typical Thermal Resistance (Note 2)	$R_{(JA)}$		25		$^\circ\text{C/W}$
	$R_{(JC)}$		2.8		
Storage Temperature	$T_{STG}$		-55 to +150		$^\circ\text{C}$
Operating Junction Temperature	$T_J$		-55 to +150		$^\circ\text{C}$

#### Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Device mounted on 100mm x 100mm x 1.6mm Cu Plate Heatsink.

## RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

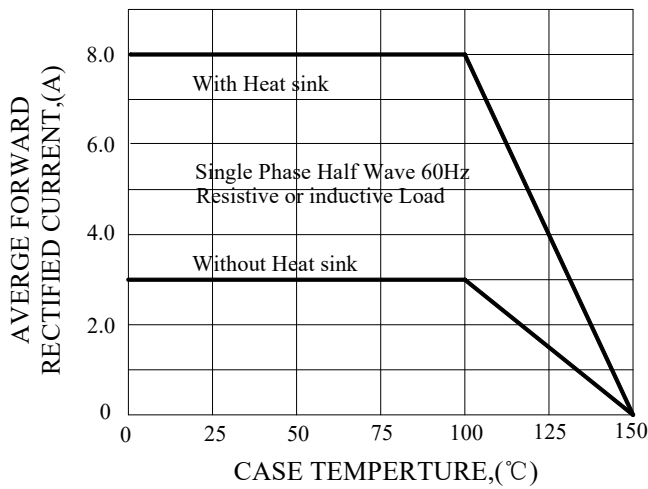


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

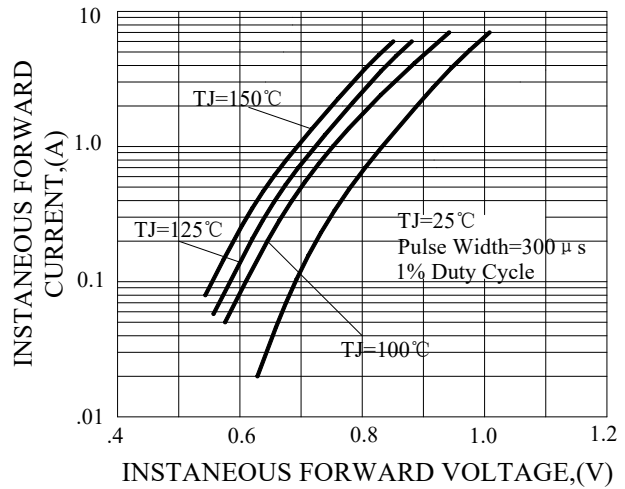


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

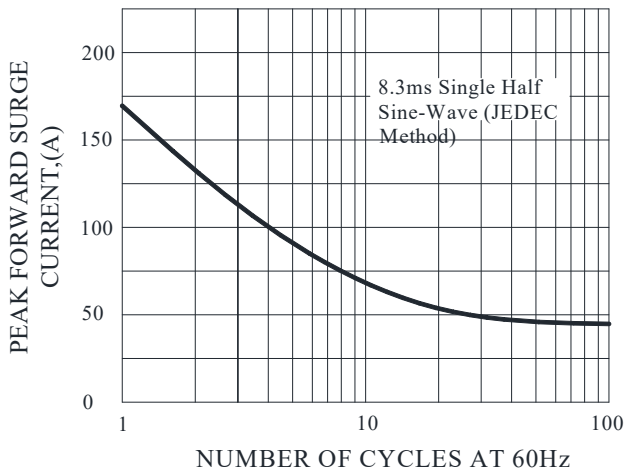


FIG.4-TYPICAL JUNCTION CAPACITANCE

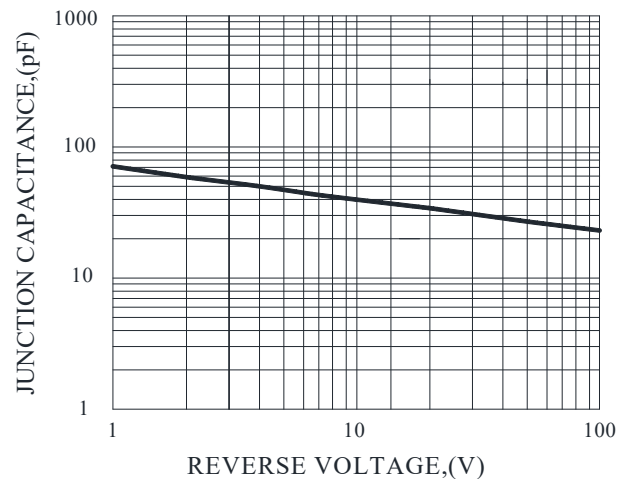
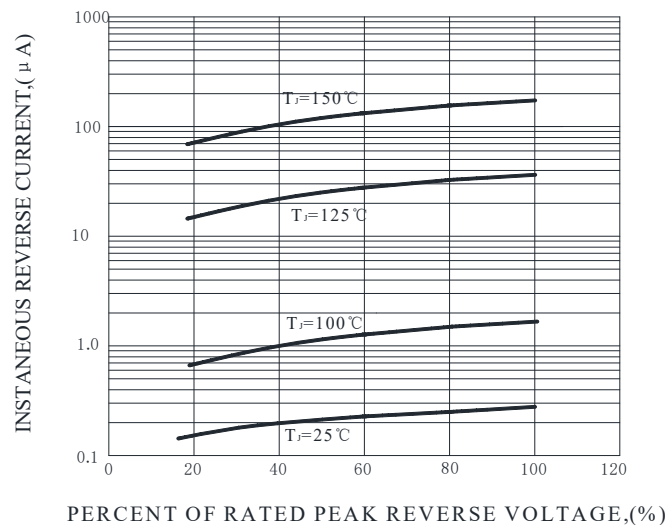
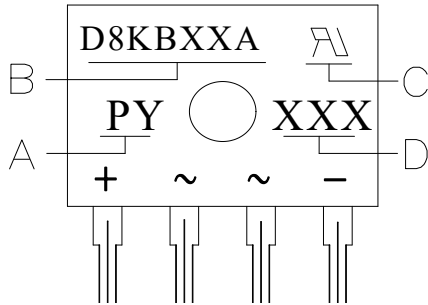


FIG.5-TYPICAL REVERSE CHARACTERISTICS



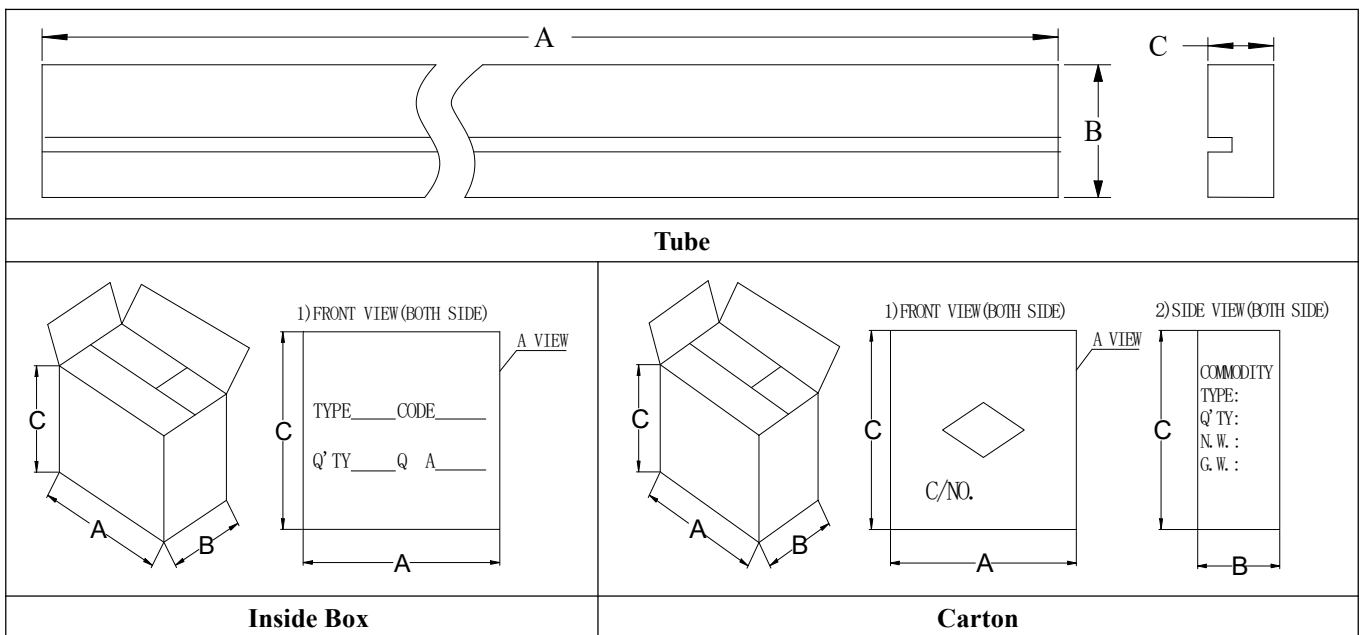
## Marking and packaging illustration

### 1、Marking



SYMBOL	Explanation
A	Trademark
B	Product Name
C	UL
D	Data Code

### 2、Packaging



OUTLINE	A (mm)	B (mm)	C (mm)
Tube	390±1	28.8±1	6.1±1
Inner box	395±3	155±3	155±3
Carton	420±5	180±5	325±5

COUNT	TUBE (PCS)	BOX (PCS)	CARTON (PCS)
D3K	25	2500	5000