

**D8KBR10A**

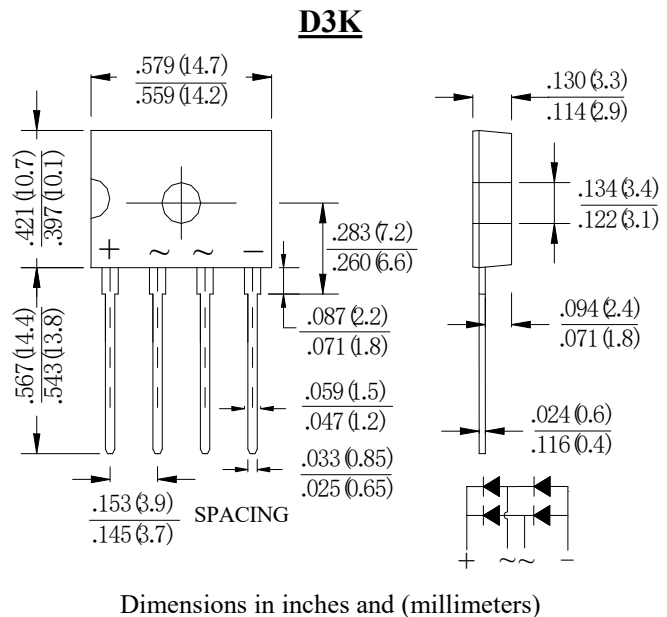
**SINGLE PHASE 8.0AMPS.FAST RECOVERY BRIDGE RECTIFIERS**

**FEATURE**

- . Fast switching
- . 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: D3K
- . 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
- . Weight: 1.33 grams
- . 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	D8KBR10A	units
Maximum Recurrent 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 Rectified Current	$I_{F(AV)}$	8.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$	150	A
Maximum Forward Voltage Drop per element @ 4.0A DC	$V_F$	1.3	V
Maximum DC Reverse Current @ $T_J=25^{\circ}C$ at rated DC blocking voltage @ $T_J=125^{\circ}C$	$I_R$	5.0 500.0	$\mu A$
$I^2t$ Rating for Fusing ( $t < 8.3ms$ )	$I^2t$	93	$A^2Sec$
Maximum Reverse Recovery Time (Note 1)	$t_{rr}$	500	nS
Typical Junction Capacitance (Note 2)	$C_J$	45	pF
Typical Thermal Resistance (Note 3)	$R_{(JC)}$	4.0	$^{\circ}C/W$
Storage Temperature	$T_{STG}$	-55 to +150	$^{\circ}C$
Operating Junction Temperature	$T_J$	-55 to +150	$^{\circ}C$

**Note:**

1. Test Conditions:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Device mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.

**RATING AND CHARACTERISTIC CURVES**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

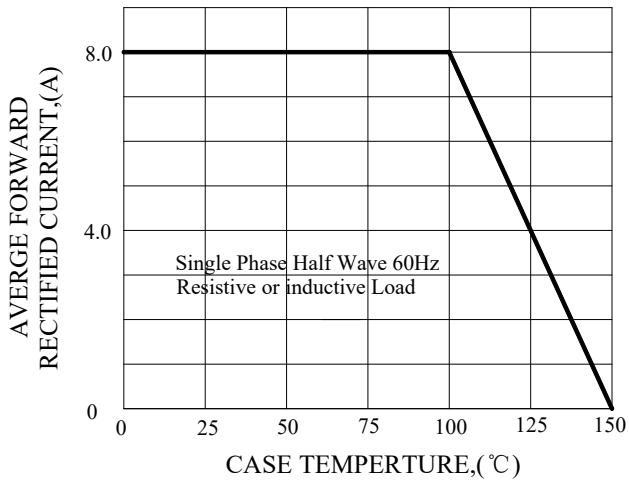


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

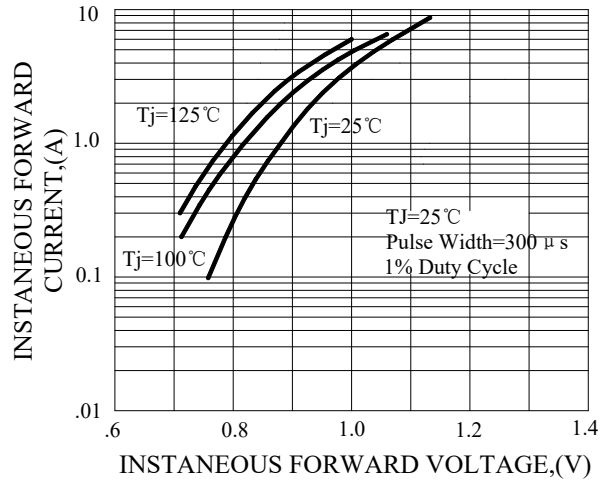


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

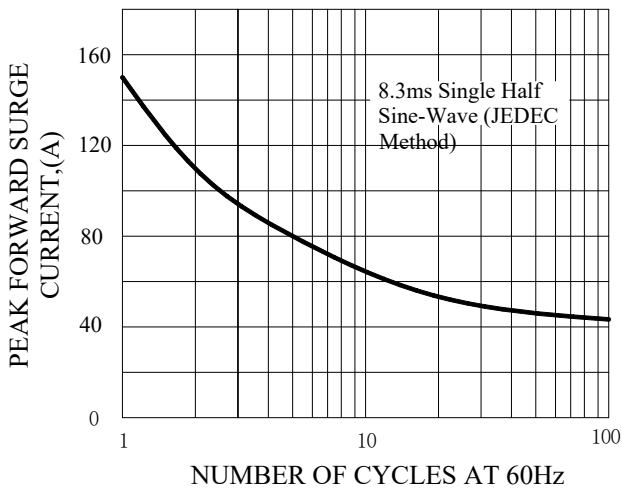


FIG.4-TYPICAL JUNCTION CAPACITANCE

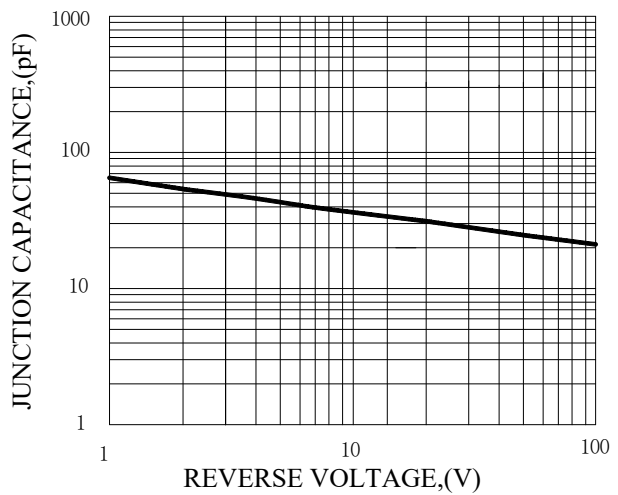


FIG.5-TYPICAL REVERSE CHARACTERISTICS

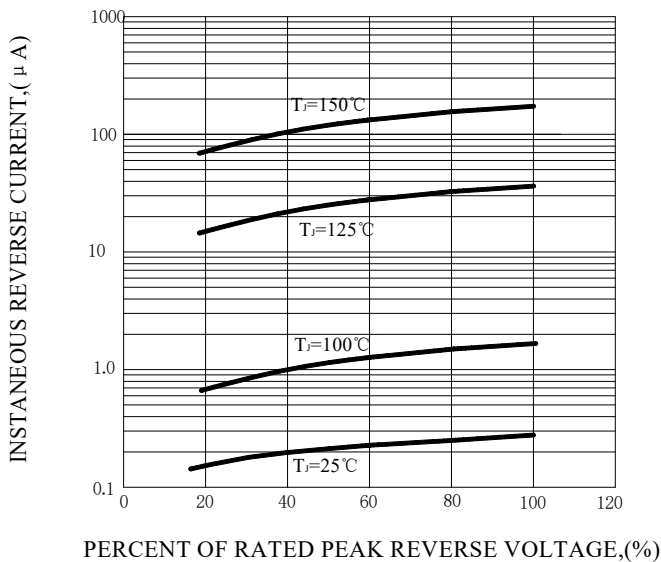
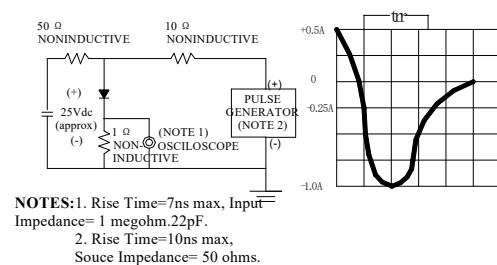
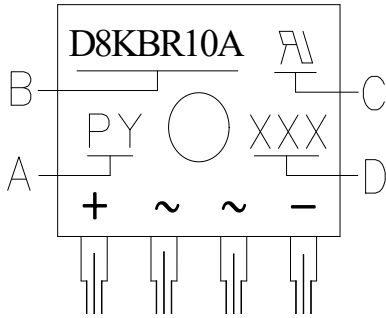


FIG.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



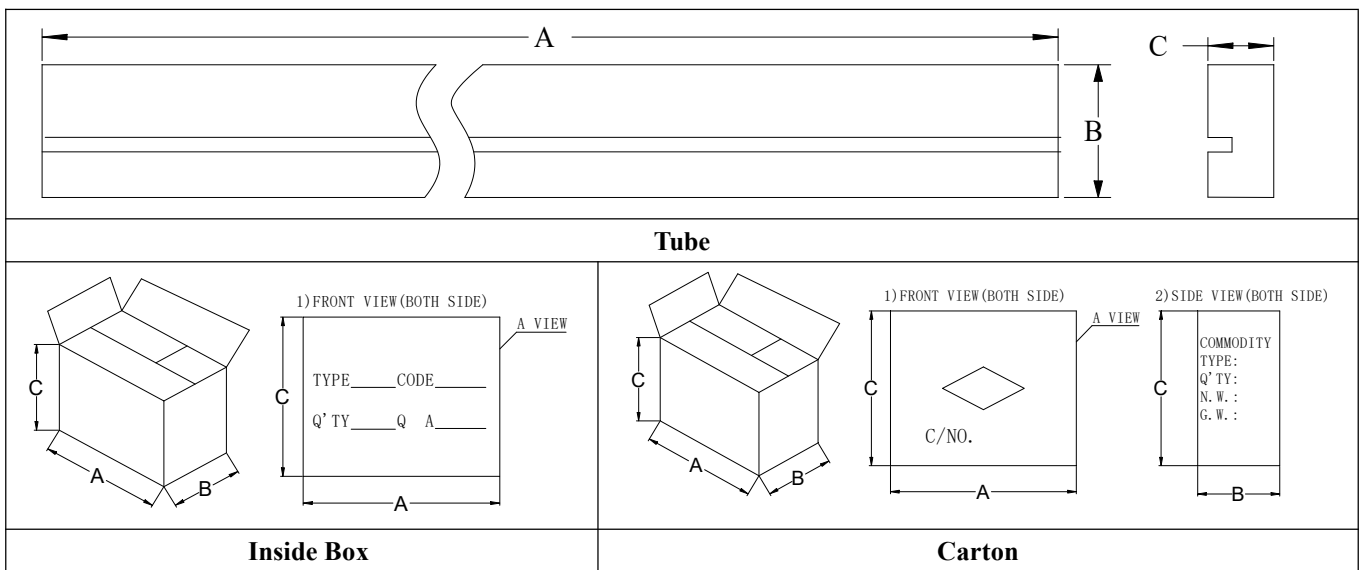
## Marking and packaging illustration

### 1、Marking



SYMBOL	Explanation
<b>A</b>	Trademark
<b>B</b>	Product Name
<b>C</b>	UL
<b>D</b>	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