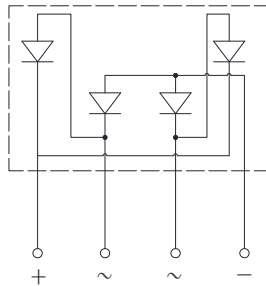
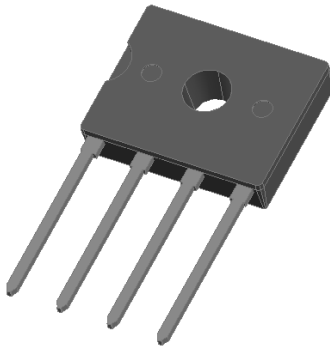


## Bridge Rectifiers



### Features

- UL recognition, file #E230084
- Ideal for printed circuit boards
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### Typical Applications

General purpose use in AC/DC bridge full wave rectification for monitor, TV, printer, power supply, switching mode power supply, adapter, audio equipment, and home appliances applications.

### Mechanical Data

- **Package:** D3K  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

### ■Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	D3UB05A	D3UB10A	D3UB20A	D3UB40A	D3UB60A	D3UB80A	D3UB100A
Device marking code				D3UB05A	D3UB10A	D3UB20A	D3UB40A	D3UB60A	D3UB80A	D3UB100A
Repetitive peak reverse voltage		V <sub>RRM</sub>	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load	With heatsink T <sub>c</sub> =140℃	I <sub>O</sub>	A	3.0						
	Without heatsink T <sub>a</sub> =29℃			1.2						
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T <sub>j</sub> =25℃		I <sub>FSM</sub>	A	100						
Current squared time @1ms≤t≤8.3ms T <sub>j</sub> =25℃, Rating of per diode		I <sup>2</sup> t	A <sup>2</sup> s	41						
Storage temperature		T <sub>stg</sub>	℃	-55 ~+150						
Junction temperature		T <sub>j</sub>	℃	-55 ~+150						
Dielectric strength @ Terminals to case, AC 1 minute		V <sub>dis</sub>	KV	2						
Mounting torque @Recommend torque: 5kg·cm		T <sub>or</sub>	kg·cm	8						

### ■Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	D3UB05A	D3UB10A	D3UB20A	D3UB40A	D3UB60A	D3UB80A	D3UB100A
Maximum instantaneous forward voltage drop per diode	$V_F$	V	$I_{FM} = 1.5\text{A}$	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	$I_{RRM}$	$\mu\text{A}$	$V_{RM} = V_{RRM}$	5						



## D3UB05A THRU D3UB100A

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

PARAMETER		SYMBOL	UNIT	D3UB05A	D3UB10A	D3UB20A	D3UB40A	D3UB60A	D3UB80A	D3UB100A
Thermal resistance	Between junction and ambient, Without heatsink	$R_{\theta J-A}$	$^\circ\text{C}/\text{W}$	55.0						
	Between junction and case, With heatsink	$R_{\theta J-C}$		1.5						

### ■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
D3UB05A -D3UB100A	B1	Approximate 1.265	25	1500	6000	TUBE

### ■ Characteristics (Typical)

FIG1:Io-Tc Curve

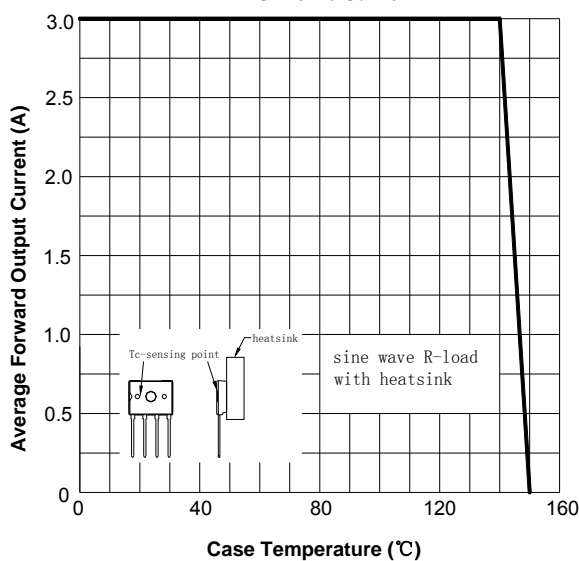


FIG2:Surge Forward Current Capability

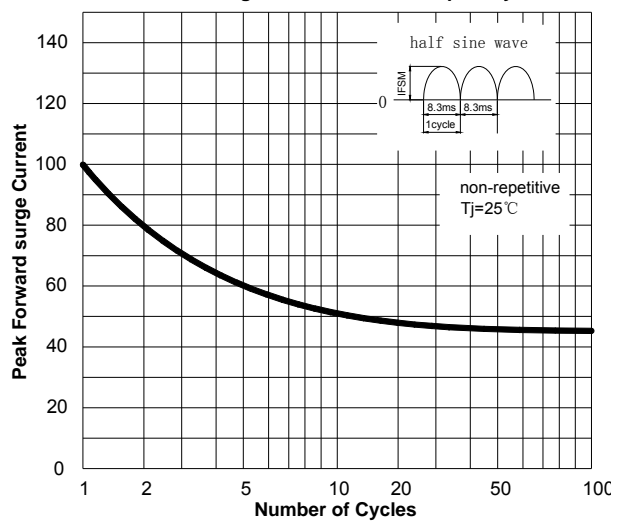


FIG3:Instantaneous Forward Voltage

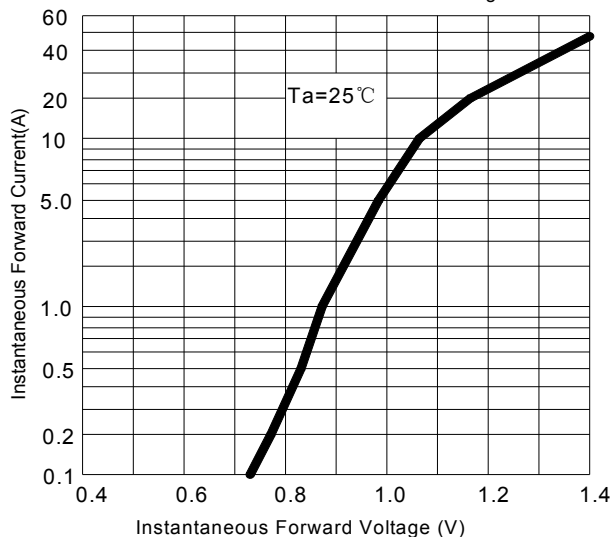
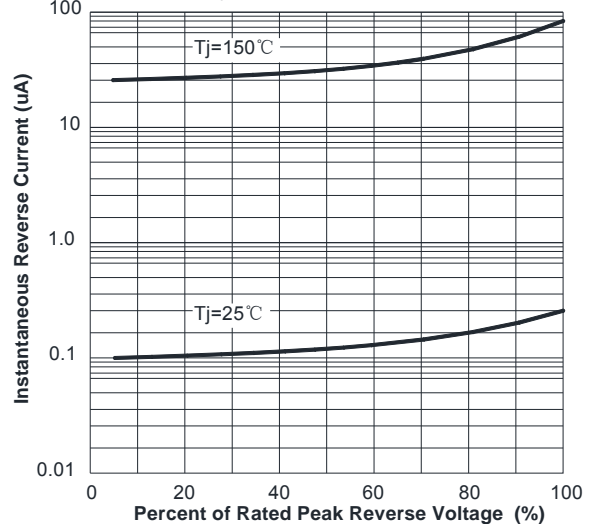


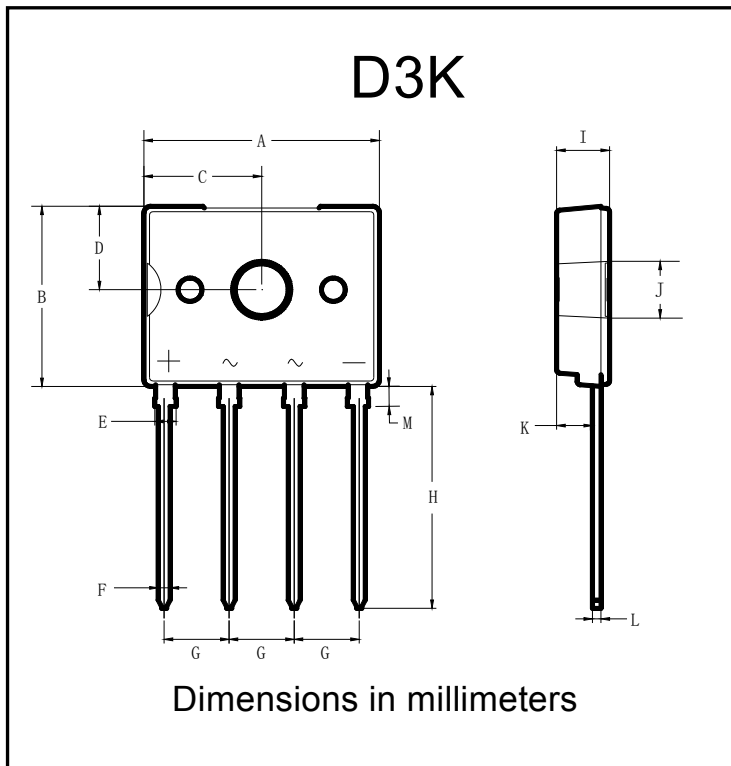
FIG4:Typical Reverse Characteristics





## D3UB05A THRU D3UB100A

### ■ Outline Dimensions



D3K		
Dim	Min	Max
A	13.30	14.30
B	10.30	11.30
C	6.40	7.40
D	4.50	5.50
E	1.05	1.45
F	0.60	0.85
G	3.70	3.90
H	13.10	13.50
I	2.60	3.60
J	3.10	3.40
K	2.00	2.20
L	0.40	0.60
M	0.90	1.50



## D3UB05A THRU D3UB100A

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