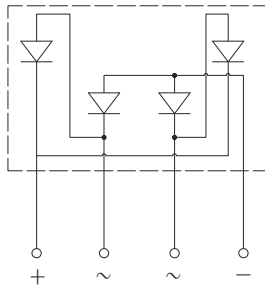
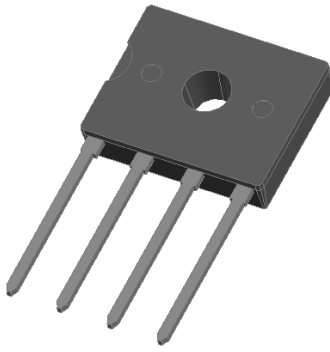


## Bridge Rectifiers



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

PARAMETER	SYMBOL	UNIT	D3UB05	D3UB10	D3UB20	D3UB40	D3UB60	D3UB80	D3UB100
Device marking code			D3UB05	D3UB10	D3UB20	D3UB40	D3UB60	D3UB80	D3UB100
Repetitive peak reverse voltage	VRRM	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load	With heatsink $T_c = 140^\circ\text{C}$	IO	A	3.0					
	Without heatsink $T_a = 29^\circ\text{C}$			1.2					
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, $T_j=25^\circ\text{C}$	IFSM	A	90						
Current squared time @1ms≤t≤8.3ms $T_j=25^\circ\text{C}$ , Rating of per diode	$I^2t$	$\text{A}^2\text{s}$	33						
Storage temperature	$T_{\text{stg}}$	$^\circ\text{C}$	-55 ~+150						
Junction temperature	$T_j$	$^\circ\text{C}$	-55 ~+150						
Dielectric strength @ Terminals to case, AC 1 minute	Vdis	KV	2						
Mounting torque @Recommend torque: 5kg·cm	Tor	kg·cm	8						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	D3UB05	D3UB10	D3UB20	D3UB40	D3UB60	D3UB80	D3UB100
Maximum instantaneous forward voltage drop per diode	$V_F$	V	IFM=1.5A	1.05						
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM	$\mu\text{A}$	VRM=VRRM	5						



# D3UB05 THRU D3UB100

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

PARAMETER		SYMBOL	UNIT	D3UB05	D3UB10	D3UB20	D3UB40	D3UB60	D3UB80	D3UB100
Thermal resistance	Between junction and ambient, Without heatsink	$R_{\theta J-A}$	$^\circ\text{C}/\text{W}$	55						
	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
D3UB05-D3UB100	B1	Approximate 1.358	25	1500	6000	TUBE
D3UB05-D3UB100	A1	Approximate 1.358	500	500	9000	BOX

## ■ Characteristics (Typical)

FIG1:  $I_o$ - $T_c$  Curve

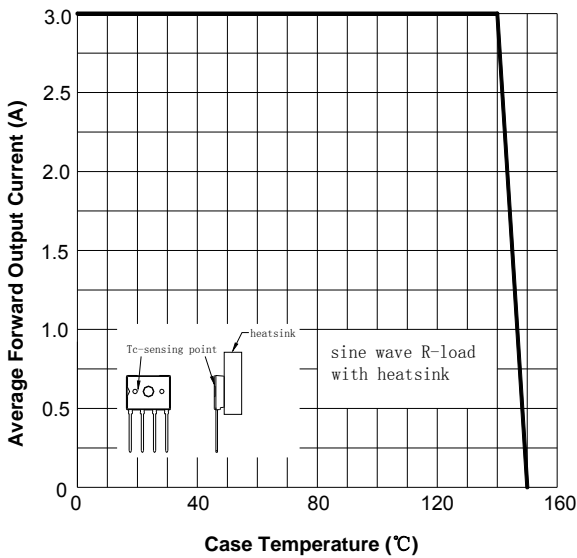


FIG2: Surge Forward Current Capability

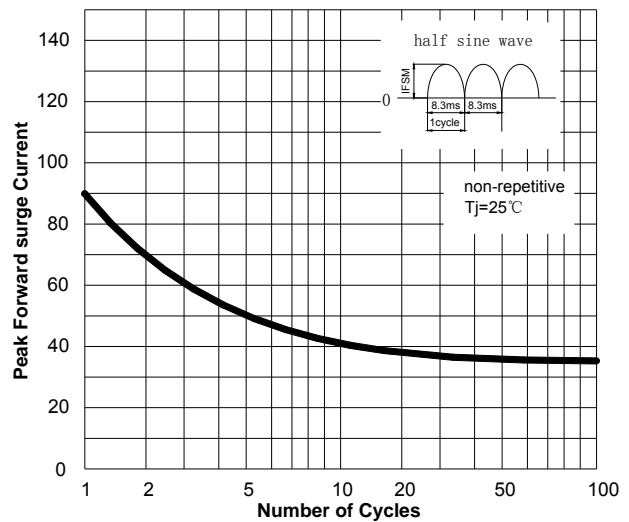


FIG3: Forward Voltage

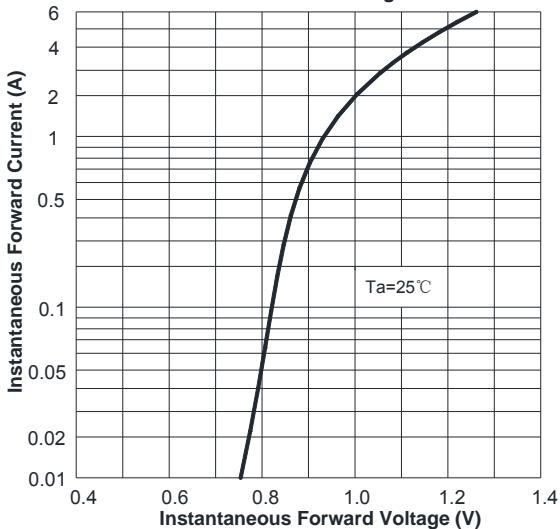
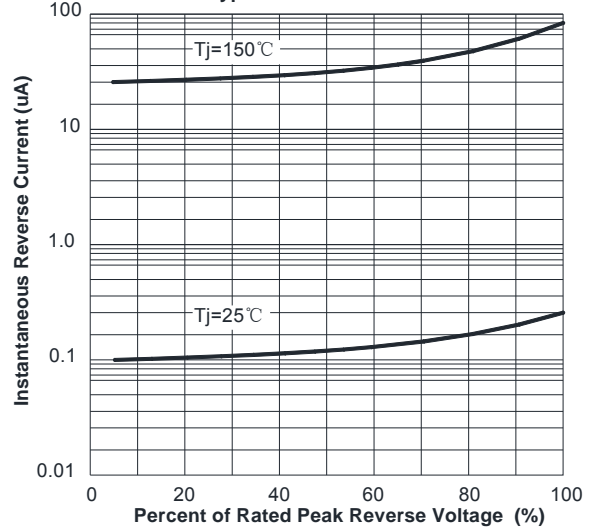


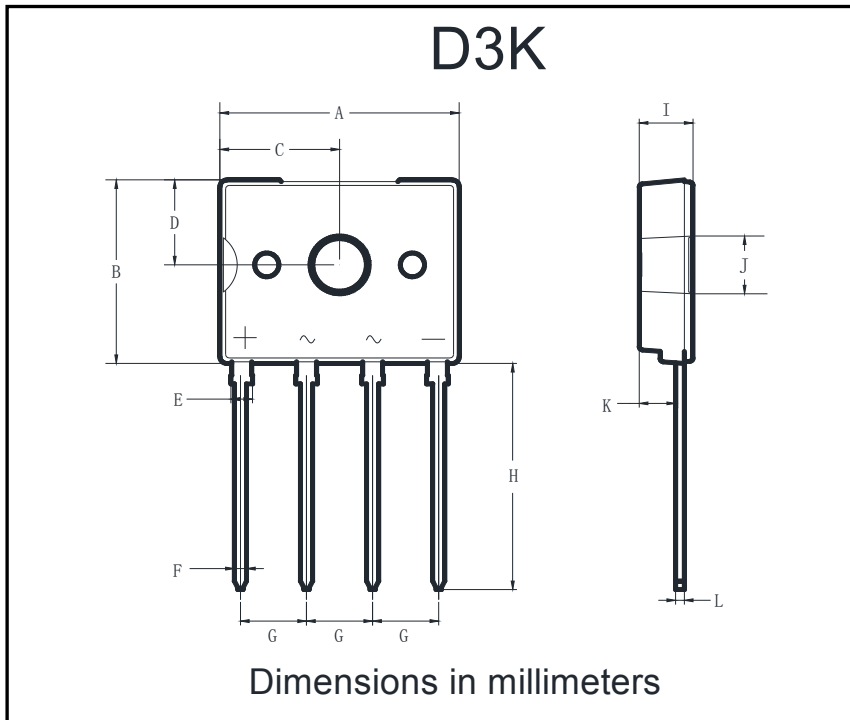
FIG4: Typical Reverse Characteristics





## D3UB05 THRU D3UB100

### ■ 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



## D3UB05 THRU D3UB100

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