

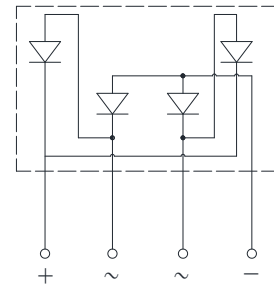
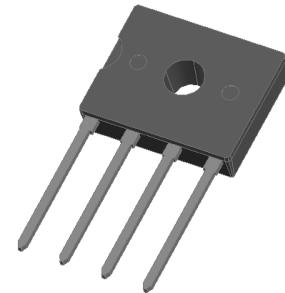
Bridge Rectifiers

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	IO	A	3.0						
			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 @ $1\text{ms} \leq t \leq 8.3\text{ms}$ $T_j=25^\circ\text{C}$, Rating of per diode	I^2t	A^2s	33						
Storage temperature	T_{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	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM	μA	VRM=VRRM	5						

■ **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 θ J-A	$^\circ\text{C}/\text{W}$	55.0						
	Between junction and case, With heatsink	R θ 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

■ **Characteristics (Typical)**

FIG1:Io-Tc Curve

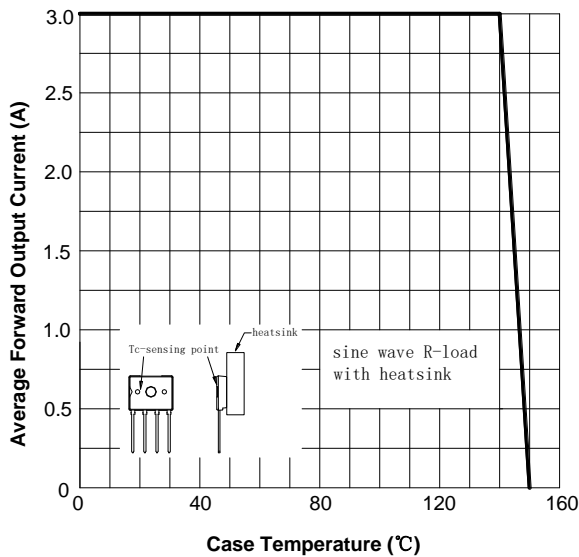


FIG2:Surge Forward Current Capability

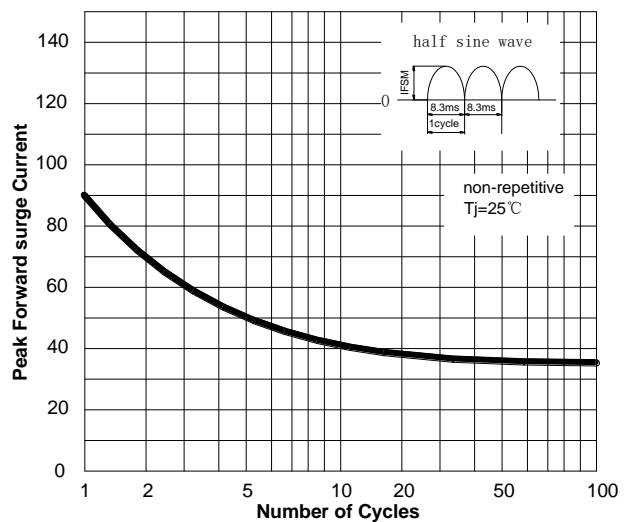


FIG3: Forward Voltage

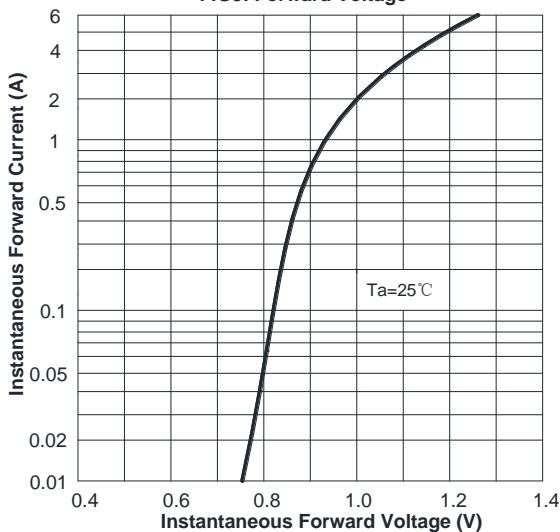
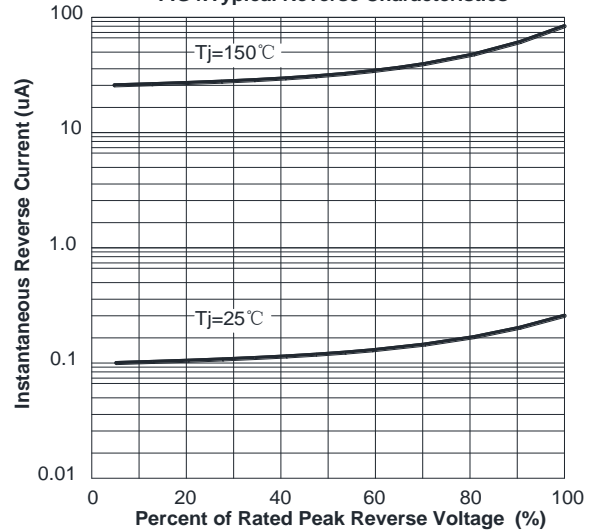
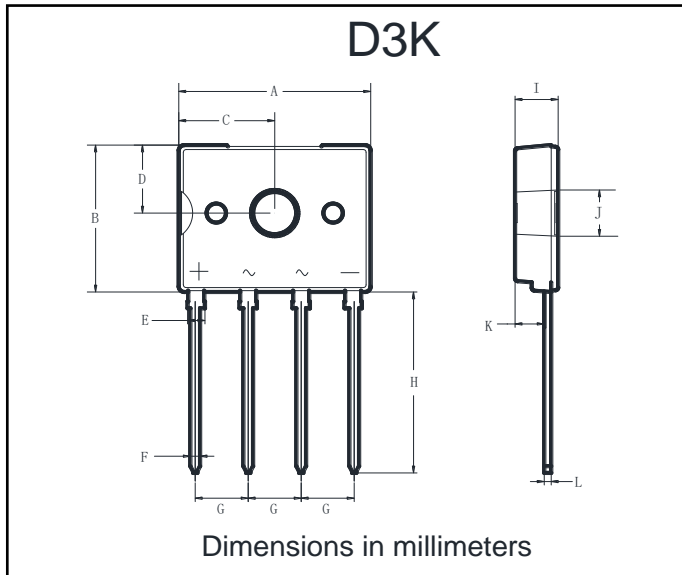


FIG4:Typical Reverse Characteristics



■ **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

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