

Bridge Rectifiers

Features

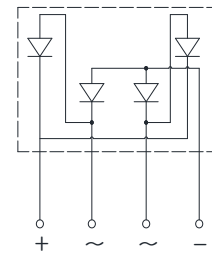
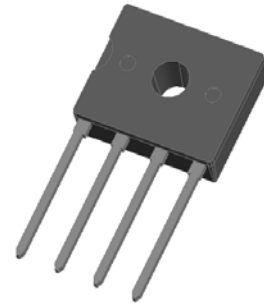
- UL recognition, file #E230084
- Ideal for printed circuit boards
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

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	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 °C	I _O	A	3.0					
	Without heatsink T _a =29 °C			1.2					
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T _j =25 °C	IFSM	A	90						
Current squared time @ 1ms≤t≤8.3ms T _j =25 °C, Rating of per diode	I ² t	A ² s	33						
Storage temperature	T _{stg}	°C	-55 ~+150						
Junction temperature	T _j	°C	-55 ~+150						
Dielectric strength @ Terminals to case, AC 1 minute	V _{dis}	KV	2						
Mounting torque @Recommend torque : 5kg·cm	Tor	kg·cm	8						

Electrical Characteristics (Ta=25 °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	I _{FM} =1.5A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	μA	V _{RM} =V _{RRM}	5						



D3UB05 ~ D3UB100

Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	D3UB05	D3UB10	D3UB20	D3UB40	D3UB60	D3UB80	D3UB100
Thermal resistance	Between junction and ambient, Without heatsink	R _{θJ-A}	°C/W	55.0						
	Between junction and case, With heatsink	R _{θJ-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: I_o-T_c Curve

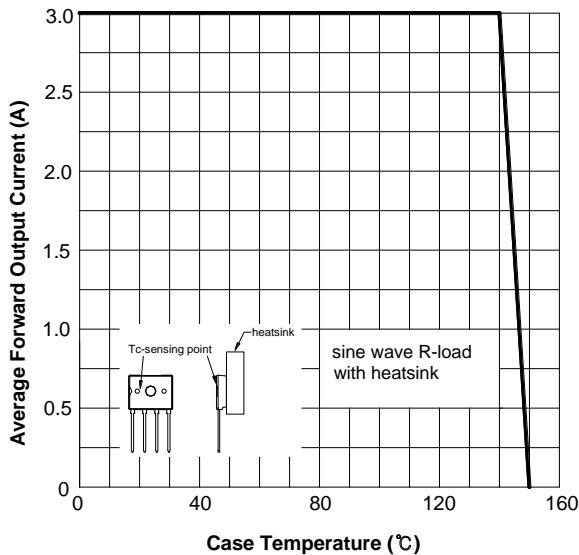


FIG2: Surge Forward Current Capability

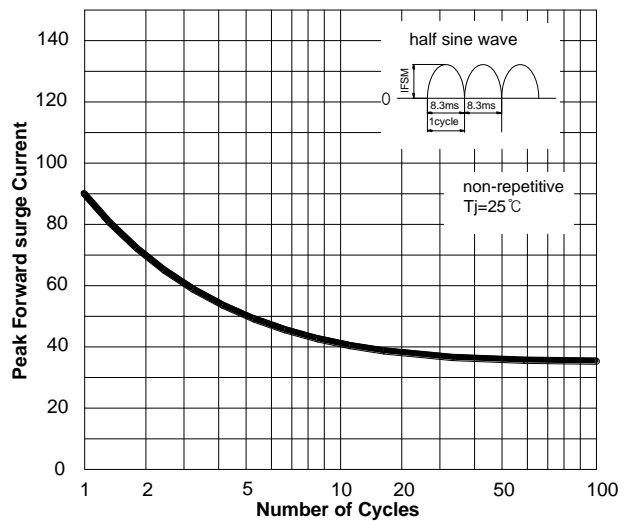


FIG3: Forward Voltage

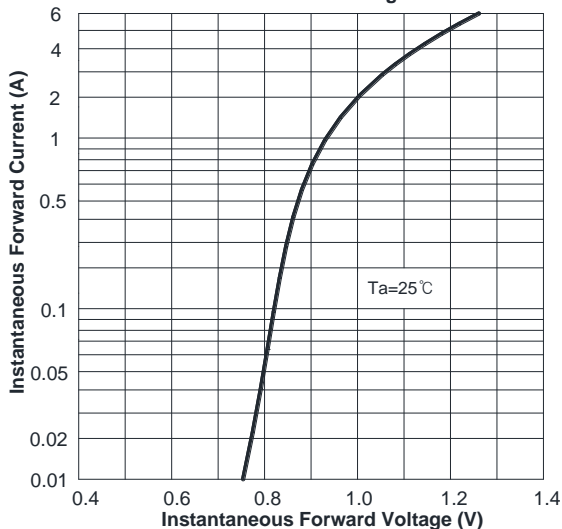
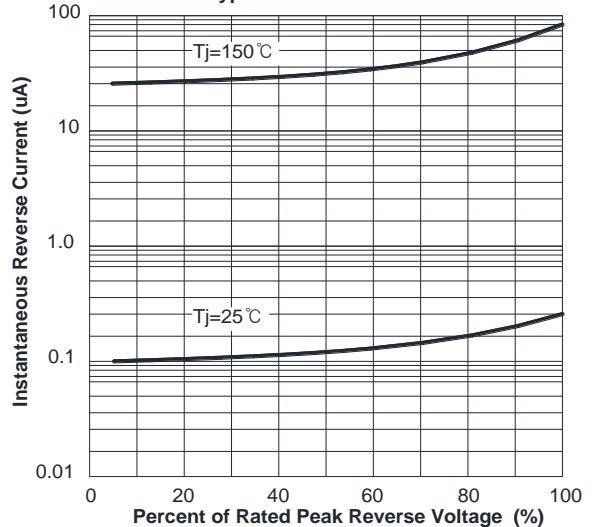
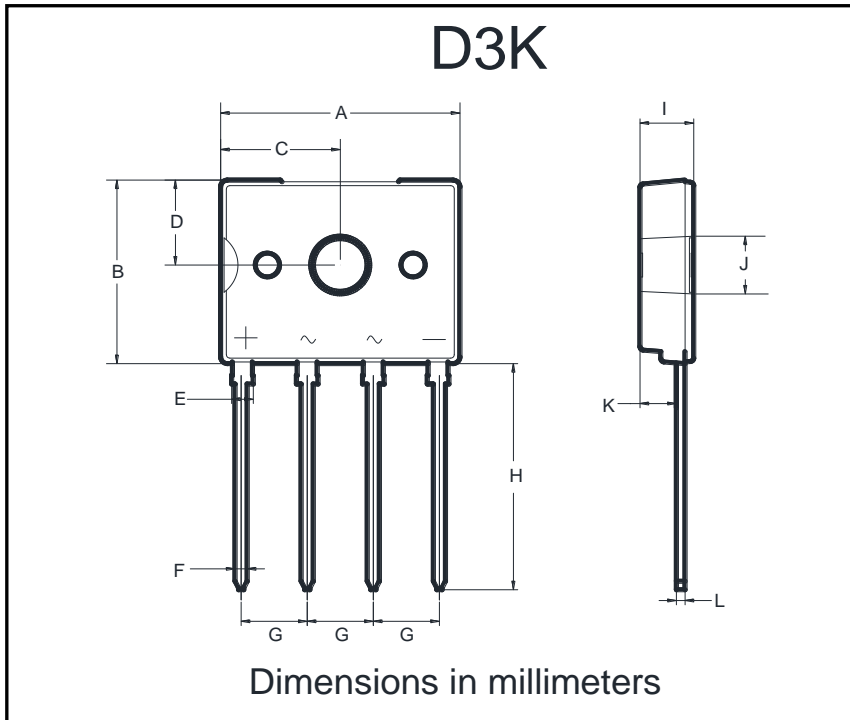


FIG4: Typical Reverse Characteristics



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