SAMYANG ELECTRONICS

D4UB05 --- D4UB100

GLASS PASSIVATED BRIDGE RECTIFIERS

VOLTAGE RANGE: 50 --- 1000 V
CURRENT: 4.0 A

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

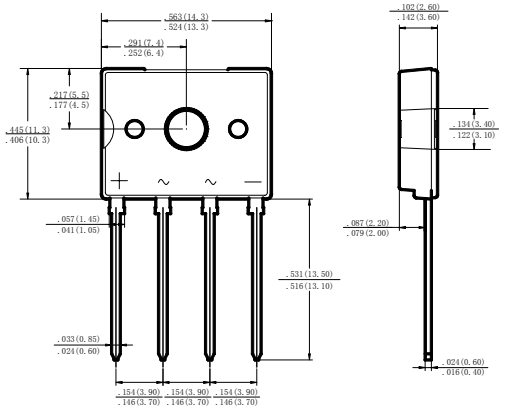
Applications

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

D3K



Dimensions in inches and (millimeters)

■Maximum Ratings (T_a=25℃ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	D4UB05	D4UB10	D4UB20	D4UB40	D4UB60	D4UB80	D4UB100
Device marking code				D4UB05	D4UB10	D4UB20	D4UB40	D4UB60	D4UB80	D4UB100
Repetitive peak reverse voltage		V_{RRM}	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load	With heatsink T_C =140℃	IO	A	4.0						
	Without heatsink T_a =29℃			1.3						
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T_j=25℃		I_{FSM}	A	135						
Current squared time @1ms≤t≤8.3ms Tj=25℃, Rating of per diode		I^2t	A^2s	75						
Storage temperature		T_{stg}	℃	-55 ~+150						
Junction temperature		T_j	℃	-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℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	D4UB05	D4UB10	D4UB20	D4UB40	D4UB60	D4UB80	D4UB100
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=2.0A	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM	μA	V_{RM}=V_{RRM}	5						

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	D4UB05	D4UB10	D4UB20	D4UB40	D4UB60	D4UB80	D4UB100
Thermal resistance	Between junction and ambient, Without heatsink	$R_{\theta J-A}$	℃/W	55						
	Between junction and case, With heatsink	$R_{\theta J-C}$		1.5						

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
D4UB05- D4UB100	B1	Approximate 1.266	25	1500	6000	TUBE
D4UB05- D4UB100	A1	Approximate 1.266	500	500	9000	BOX

RATINGS AND CHARACTERISTIC CURVES

FIG1:Io-Tc Curve

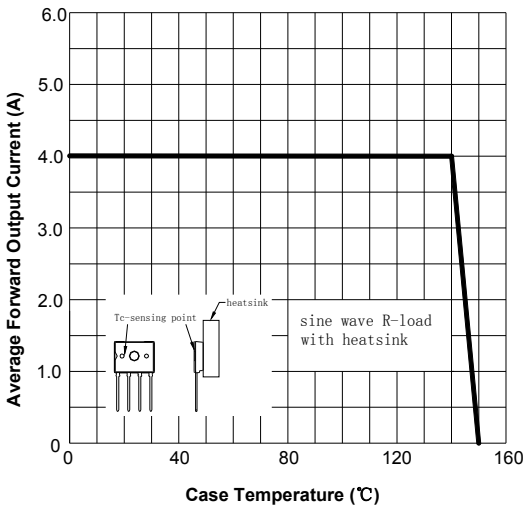


FIG2:Surge Forward Current Capability

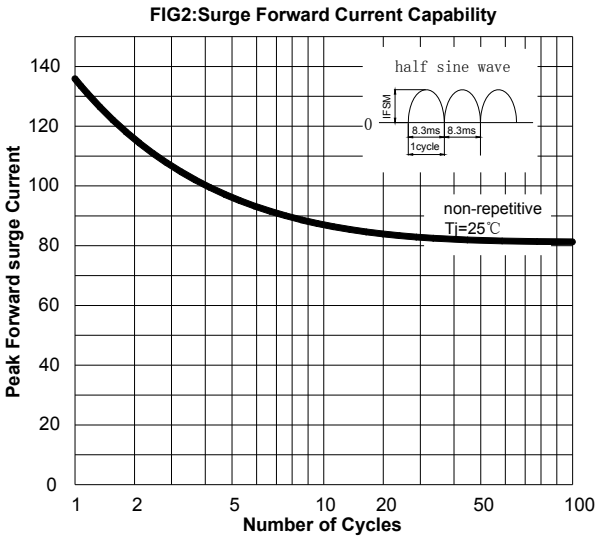


FIG3: Forward Voltage

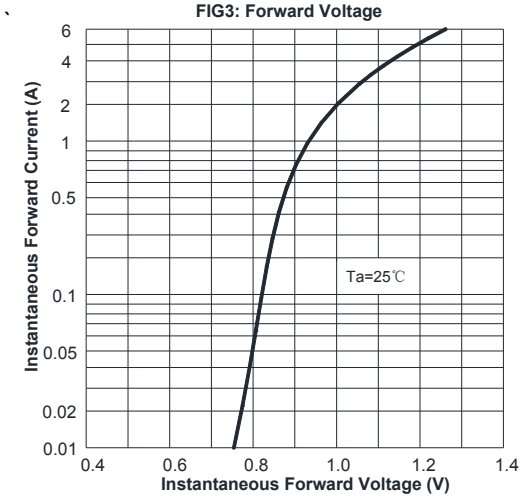


FIG4:Typical Reverse Characteristics

