

### **Features**

- UL recognition, file #E230084
- Glass passivated chip junction
- 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<sub>a</sub>=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	
Maximum Repetitive Peak Reverse Voltage		VRRM	٧	50	100	200	400	600	800	1000	
Maximum RMS Voltage		VRMS	V	35	70	140	280	420	560	700	
Maximum DC blocking Voltage		VDC	V	50	100	200	400	600	800	1000	
Average rectified output current	With heatsink Tc =140°C	IO A	Α	3.0							
@60Hz sine wave, R-load	Without heatsink Ta =25°C	10		1.2							
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25°C			_	100							
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C		IFSM	Α	200							
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode		l²t	A <sup>2</sup> s	41							
Storage temperature		T <sub>stg</sub>	°C	-55 ~ <b>+</b> 150							
Junction temperature		Tj	°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** (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	VF	٧	IFM=1.5A	1.0						
Maximum DC reverse current at rated DC blocking voltage	IR		T <sub>j</sub> =25℃	T <sub>j</sub> =25°C 5						
per diode	0 0 1 1 1		100							
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	34						

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

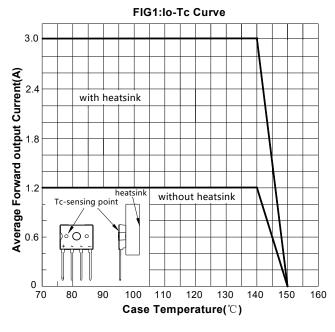
PARAMETER		SYMBOL	UNIT	D3UB05A	D3UB10A	D3UB20A	D3UB40A	D3UB60A	D3UB80A	D3UB100A
Thermal	Between junction and ambient, Without heatsink		°C/W	55.0						
resistance	Between junction and case, With heatsink	R <sub>θJ-C</sub>	C/VV	1.5						

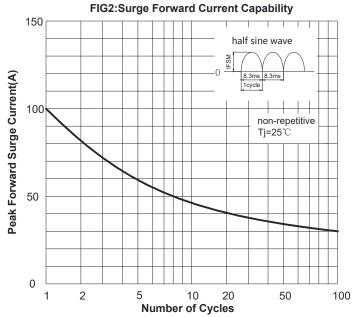
Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

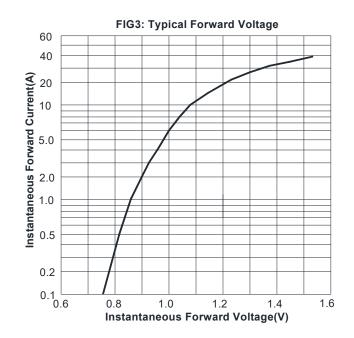
**■Ordering Information** (Example)

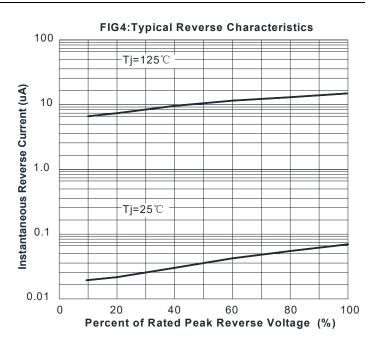
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
D3UB05A -D3UB100A	B1	Approximate 1.265	25	1500	6000	TUBE

## **■ Characteristics** (Typical)

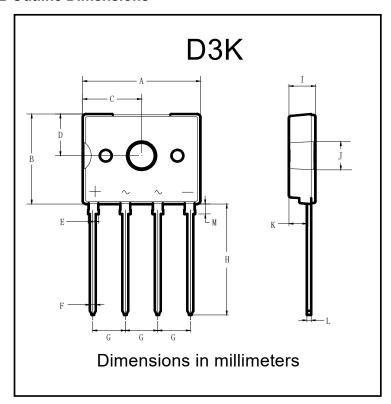








### **■ Outline Dimensions**



D3K						
Dim	Min	Max				
Α	13.30	14.30				
В	10.30	11.30				
С	6.40	7.40				
D	4.50	5.50				
E	1.05	1.45				
F	0.60	0.85				
G	3.70	3.90				
Н	13.10	13.50				
I	2.60	3.60				
J	3.10	3.40				
K	2.00	2.20				
L	0.40	0.60				
М	0.90	1.50				



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