

RoHS Compliant Product  
 A suffix of “-C” specifies halogen & lead-free

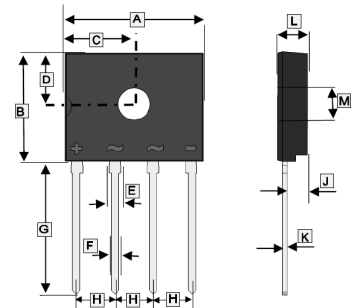
**FEATURES**

- $I_o$  : 3A
- $V_{RRM}$  : 50~1000V
- Glass passivated chip
- High surge forward current capability

**APPLICATIONS**

- General purpose 1 phase Bridge rectifier applications

**D3K**



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	13.3	14.3	G	13.1	13.5
B	10.3	11.3	H	3.7	3.9
C	6.4	7.4	J	2.0	2.2
D	4.5	5.5	K	0.4	0.6
E	1.05	1.45	L	2.6	3.6
F	0.60	0.85	M	3.1	3.4

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.  
 For capacitive load, de-rate current by 20%.)

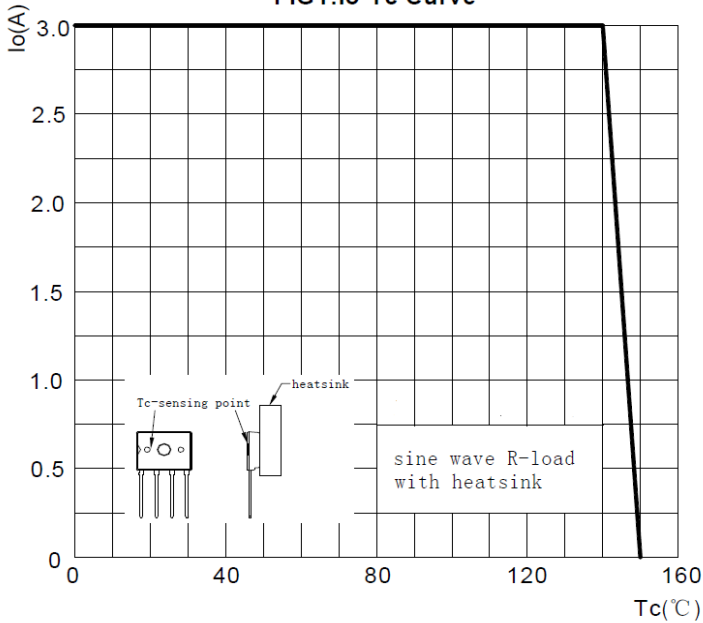
Parameter	Symbol	Part Number							Unit
		D3UB 05	D3UB 10	D3UB 20	D3UB 40	D3UB 60	D3UB 80	D3UB 100	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Average Rectified Output Current @ 60Hz sine wave, R-load	Without heatsink $T_A=29^\circ\text{C}$	1.2							A
	With heatsink $T_c=140^\circ\text{C}$	3.0							
Surge(Non- repetitive)Forward Current @ 60Hz sine wave, 1 cycle, $T_J=25^\circ\text{C}$	$I_{FSM}$	90							A
Current Squared Time <sup>1</sup>	$I^2t$	33							A <sup>2</sup> S
Dielectric Strength@ Terminals to case , AC 1 minute	$V_{DIS}$	2							KV
Mounting Torque@ Recommend torque : 5kg.cm	Tor	8							Kg.cm
Peak Forward Voltage@ $I_{FM}=1.5\text{A}$ , Pulse measurement, Rating of per diode	$V_{FM}$	1.05							V
Peak Reverse Current@ $V_{RM}=V_{RRM}$ , Pulse measurement, Rating of per diode	$I_{RRM}$	10							$\mu\text{A}$
Thermal Resistance	Without heatsink	55							$^\circ\text{C} / \text{W}$
	With heatsink	1.5							
Junction and Storage temperature range	$T_J, T_{STG}$	-55~+150							$^\circ\text{C}$

Notes :

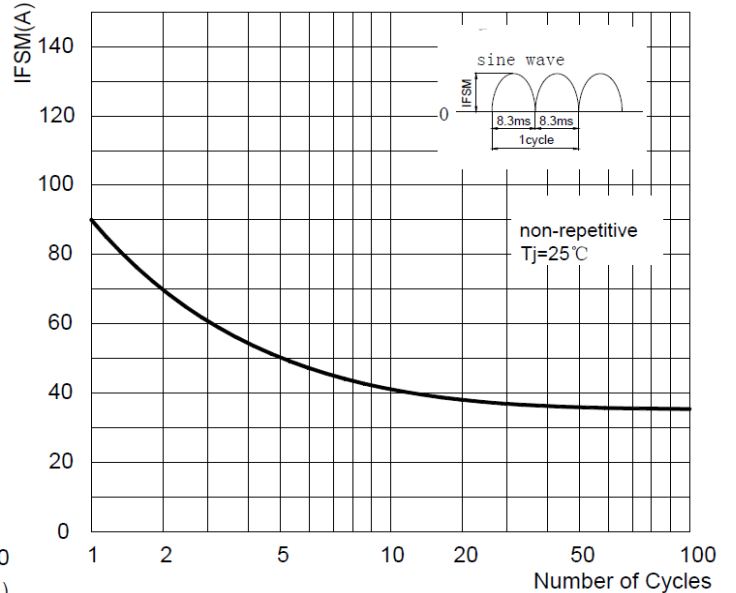
1.  $1\text{ms} \leq t < 8.3\text{ms}$   $T_J=25^\circ\text{C}$  , Rating of per diode

**RATINGS AND CHARACTERISTIC CURVES**

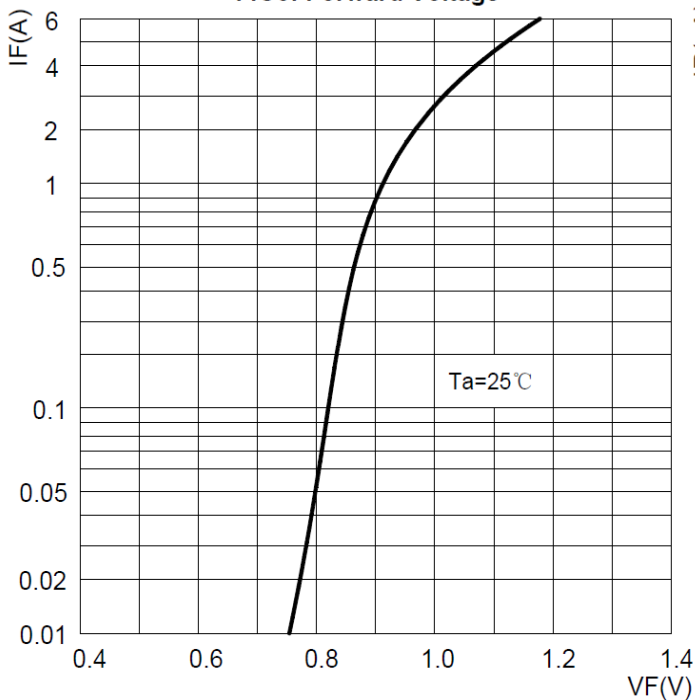
**FIG1:  $I_o$ - $T_c$  Curve**



**FIG2: Surge Forward Current Capacity**



**FIG3: Forward Voltage**



**FIG4: Typical Reverse Characteristics**

