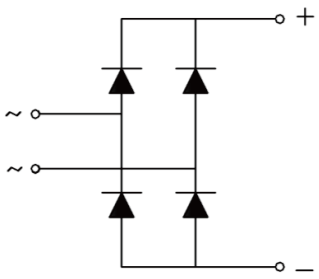
Bridge Rectifiers

Single Phase Bridge Rectifer KBPC 50A

Feature

- International standard package
- Low forward voltage drop
- Isolation voltage 2000V



Application

- DC power suppliers for apparatus device
- Input rectifying power supply for PWM converters
- Inverter welders

Maximum value

Symbol	Parameter	Rating			Unit
		KBPC5002	KBPC5006	KBPC5010	
V_{RRM}	Peak reverse repetitive voltage	200	600	1000	V
V_{RSM}	Peak reverse non-repetitive voltage	300	700	1100	V

Symbol	Parameter	Test condition	Rating	Unit
$I_{F(AV)}$	Mean on-state current	180° half sine wave 50Hz One side heat radiation Tc:55°C	50	A
I_{FSM}	Forward surge current	t=10ms,50Hz,sin,T_{jm}	500	A
I^2t	I^2t value	V_R = 0.6V_{RRM} , T_{jm}	1250	A^2S
V_{ISO}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso}:1mA(max)	2000	V
T_j	Operating junction temperature		-40 to +150	°C
T_{jm}	Rated junction temperature		150	°C
T_{stg}	Storage temperature		-40 to +150	°C
M_d	Mounting torque（copper plate）M5		2	N・M
Wt	weight		21	g

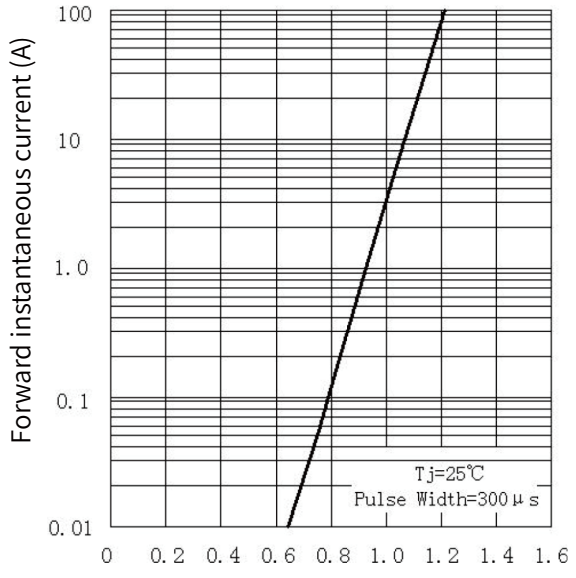
Electrical characteristics :

Symbol	Parameter	Test condition	Rating	Unit
I_{RRM}	Peak reverse repetitive current	V_R=V_{RRM}, sine half T_j=25°C	5	μA
		V_R=V_{RRM}, sine half T_j=150°C	3	mA
V_{FM}	Peak forward voltage	I_{FM}=25A, T_j=25 °C	1.1	V
$R_{th(j-c)}$	Thermal impedance（junction-case）	Single-side heat dissipation, sine half wave	1.5	°C/W

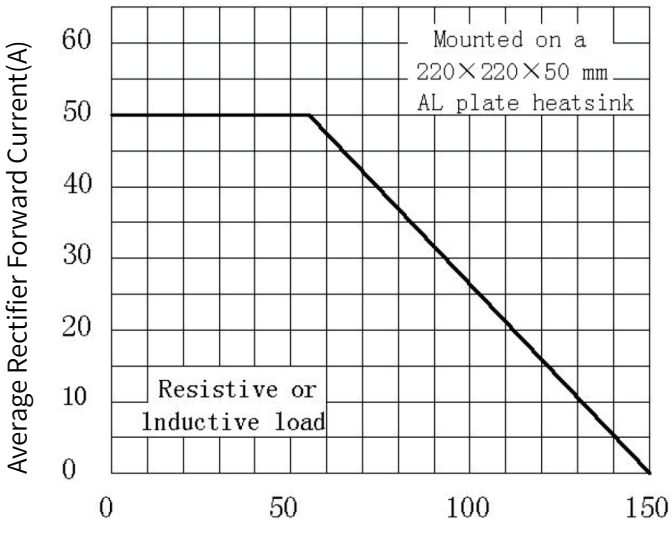
http://www.greegoo.com
Peter@greegoo.com

Performance Curves

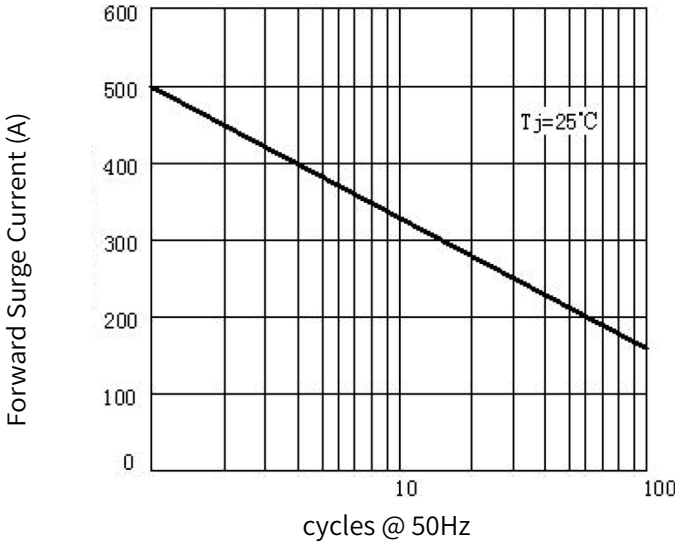
Forward curve



Case temperature and average forward current characteristic curve

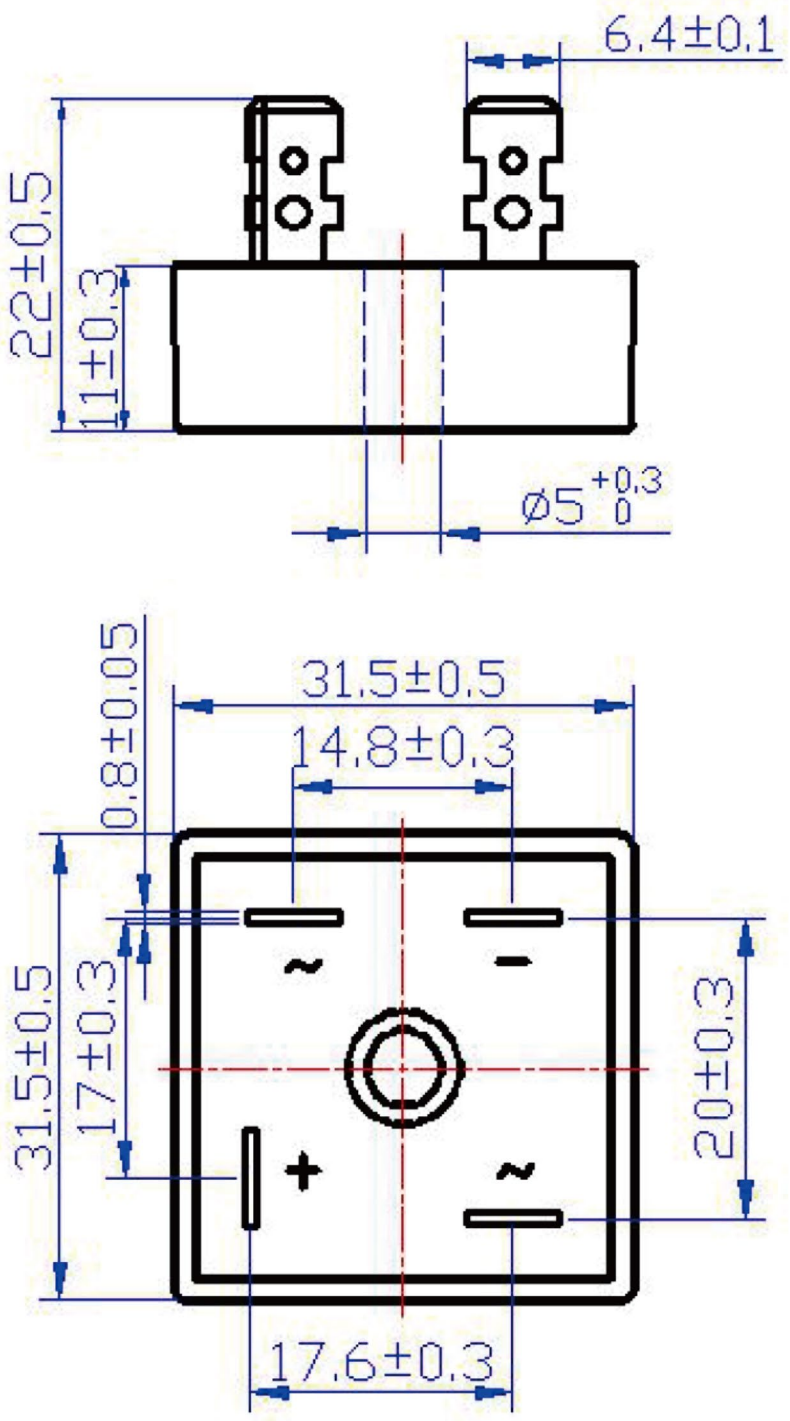


Forward Surge current cycle number curve



http://www.greegoo.com
Peter@greegoo.com

Dimension



http://www.greegoo.com
Peter@greegoo.com