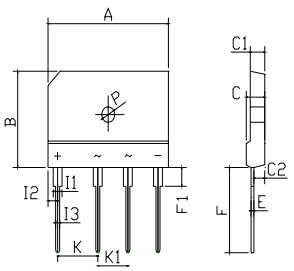
RBV6005-RBV610

Silicon Bridge Rectifiers

FEATURES

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Surge overload rating: 200 amperes peak



KBJ6		
Dim	Min	Max
A	29.80	30.20
B	19.80	20.20
C	4.45	4.75
C1	3.45	3.75
C2	2.50	2.80
E	0.60	0.80
F	17.40	18.00
F1	3.60	4.20
I1	1.95	2.25
I2	2.25	2.55
I3	0.85	1.15
K	9.70	10.30
K1	7.20	7.80
P	Ø3.20Typical	
All Dimensions in mm		

Maximum Ratings (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	RBV6005	RBV601	RBV602	RBV604	RBV606	RBV608	RBV610	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward Output current @T_C=50℃	$I_{F(AV)}$	6.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	200							A
I^2t Rating for fusing @Tj=25℃	I^2t	120							A^2S

Thermal Characteristics

Characteristic	Symbol	RBV6005	RBV601	RBV602	RBV604	RBV606	RBV608	RBV610	UNITS
Typical thermal resistance (NOTE2)	$R_{\theta JA}$ $R_{\theta JC}$	26 4.0							℃/W
Operating junction temperature range	T_J	- 55 ---- + 150							℃
Storage temperature range	T_{STG}	- 55 ---- + 150							℃

Electrical Characteristics (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	RBV6005	RBV601	RBV602	RBV604	RBV606	RBV608	RBV610	UNITS
Maximum instantaneous forward voltage @3.0A	V_F	1.0							V
Maximum reverse current @T_A=25 ℃ at rated DC blocking voltage @T_A=100℃	I_R	10 200							μ A

FIG.1 – PEAK FORWARD SURGE CURRENT

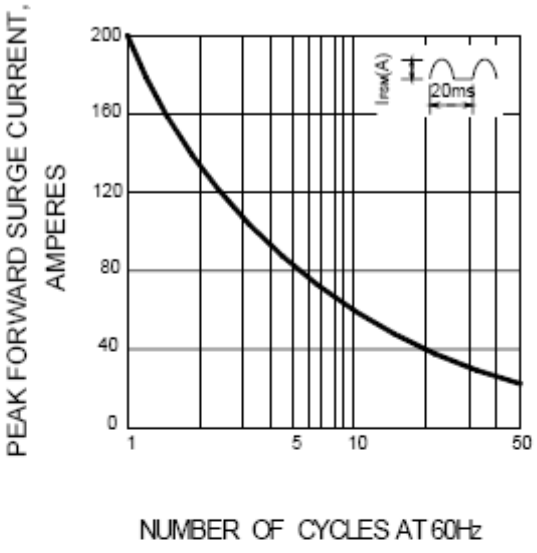


FIG.2 – FORWARD DERATING CURVE

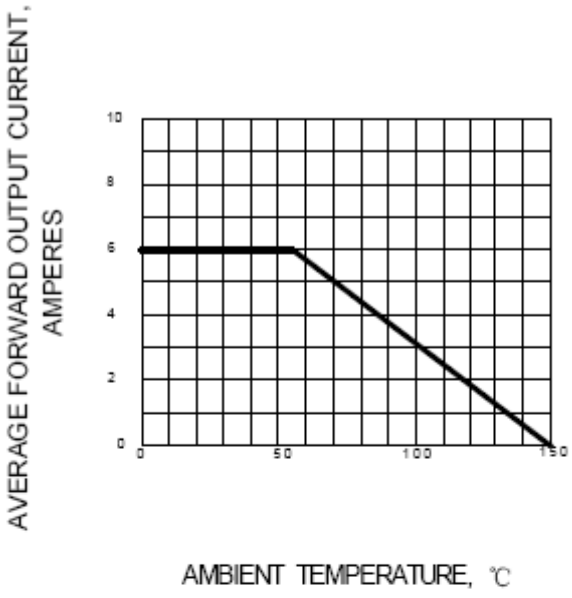
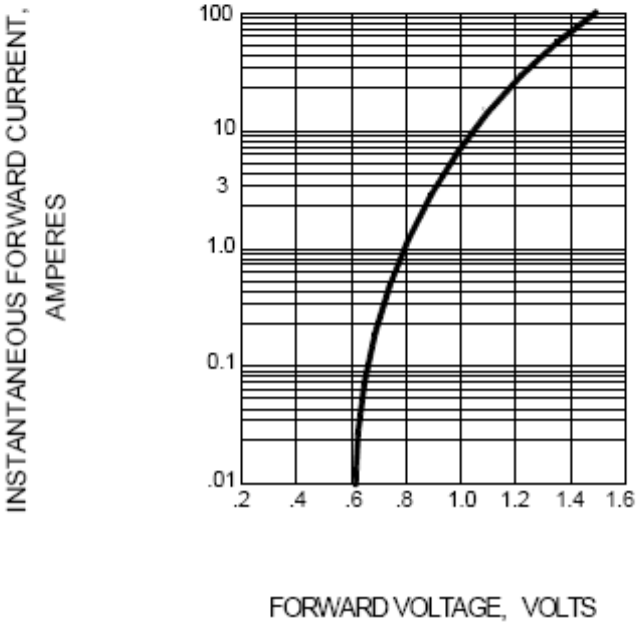


FIG.3 – TYPICAL FORWARD CHARACTERISTIC



Device	Package	Shipping
RBV6005-RBV610	KBJ6	250 Units/Box