Silicon Bridge Rectifiers *RBV15005--RBV1510*

FEATURES

Lead-free

- Rating to 1000V PRV
- Surge overload rating to 200 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead solderable per MIL-STD-202 method 208

MECHANCAL DATA

- Polarity: Symbols molded on body
- Weight: 0.23 ounces,6.6 grams
- Mounting position: Any

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

Characteristic	Symbol	RBV15005	RBV1501	RBV1502	RBV1504	RBV1506	RBV1508	RBV1510	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=55℃	$I_{F(AV)}$	15.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	300							A

Thermal Characteristics

Characteristic	Symbol	RBV15005	RBV1501	RBV1502	RBV1504	RBV1506	RBV1508	RBV1510	UNITS
Typical junction capacitance per element	C_J	85							p F
Typical thermal resistance	$R_{\theta JC}$	1.9							℃/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	RBV15005	RBV1501	RBV1502	RBV1504	RBV1506	RBV1508	RBV1510	UNITS
Maximum instantaneous forward voltage @7.5A	V_F	1.1							V
Maximum reverse current @T_A=25 ℃	I_R	10.0							μ A
at rated DC blocking voltage @T_A=100℃		0.2							mA

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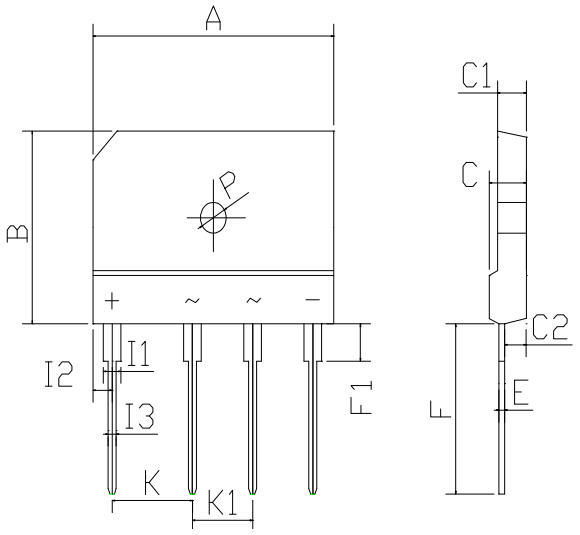
PACKAGE OUTLINE DIMENSIONS



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		

PACKAGE INFORMATION

Device	Package	Shipping
RBV15005--RBV1510	KBJ6	250 Units/Box

Silicon Bridge Rectifiers

RBV15005--RBV1510

FIG.1 – PEAK FORWARD SURGE CURRENT

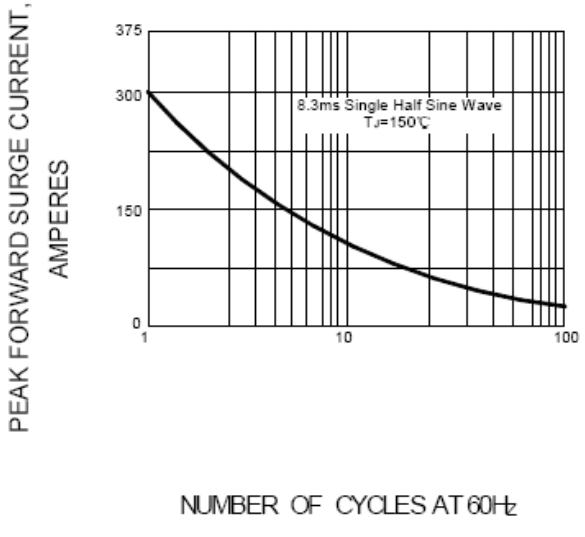


FIG.2 – FORWARD DERATING CURVE

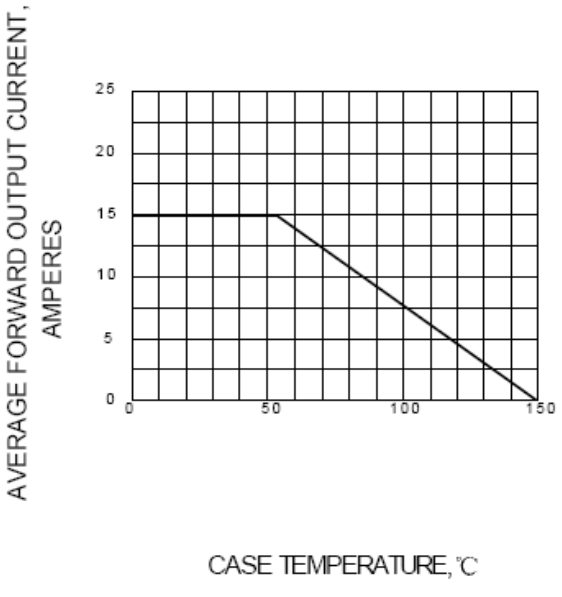


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

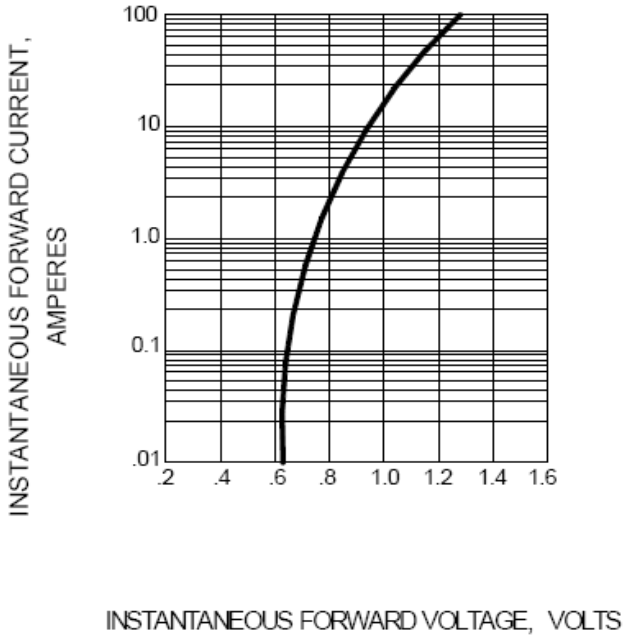


FIG.4 – TYPICAL JUNCTION CAPACITANCE