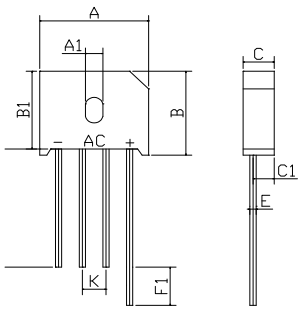
KBU4005-KBU410

Silicon Bridge Rectifiers

FEATURES

- Rating to 1000V PRV
- Surge overload rating to 150 Amperes peak
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead solderable per MIL-STD-202 method 208



KBU		
Dim	Min	Max
A	22.80	23.20
A1	3.70	4.10
B	18.90	19.30
B1	17.60	18.00
C	6.05	6.85
C1	4.50	4.80
E	Ø1.20	Ø1.40
F	25min	
F1	4min	
K	4.70	5.30
All Dimensions in mm		

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

Characteristic	Symbol	KBU4005	KBU401	KBU402	KBU404	KBU406	KBU408	KBU410	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_A=50℃	$I_{F(AV)}$	4.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	150							A
I²t Rating for fusing @Tj=25℃	I²t	93							A²S

Thermal Characteristics

Characteristic	Symbol	KBU4005	KBU401	KBU402	KBU404	KBU406	KBU408	KBU410	UNITS
Typical thermal resistance	$R_{\theta JA}$ $R_{\theta JC}$	19 4.0							℃/W
Operating junction temperature range	T_J	- 55 ---- + 125							℃
Storage temperature range	T_{STG}	- 55 ---- + 150							℃

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

Characteristic	Symbol	KBU4005	KBU401	KBU402	KBU404	KBU406	KBU408	KBU410	UNITS
Maximum instantaneous forward voltage @2.0A @4.0A	V_F	1.0 1.1							V
Maximum reverse current @T_A=25 ℃ at rated DC blocking voltage @T_A=100℃	I_R	5.0 0.5							μ A mA

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RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

FIG.1 MAXIMUM DERATING CURVE FOR OUTPUT CURRENT

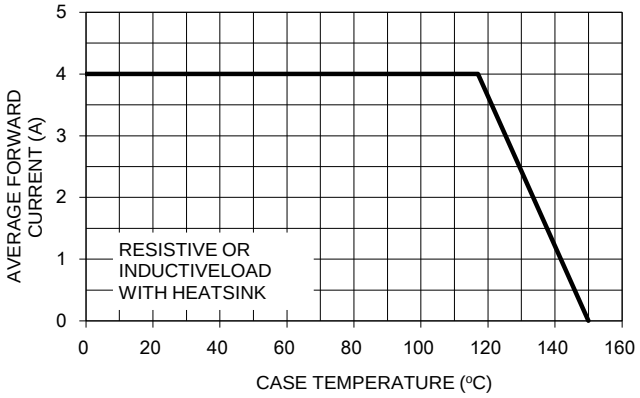


FIG. 2 MAXIMUM FORWARD SURGE CURRENT PER LEG

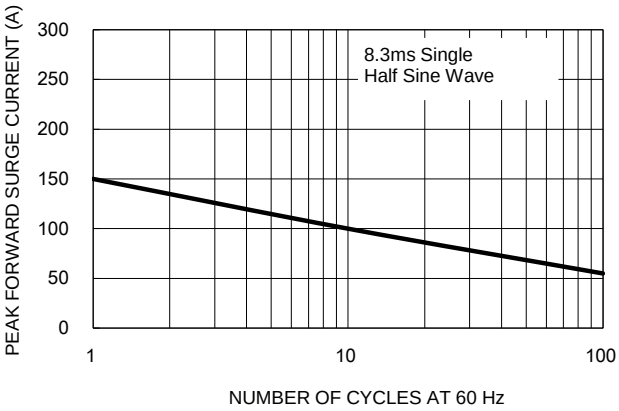


FIG. 3 TYPICAL REVERSE CHARACTERISTICS PER LEG

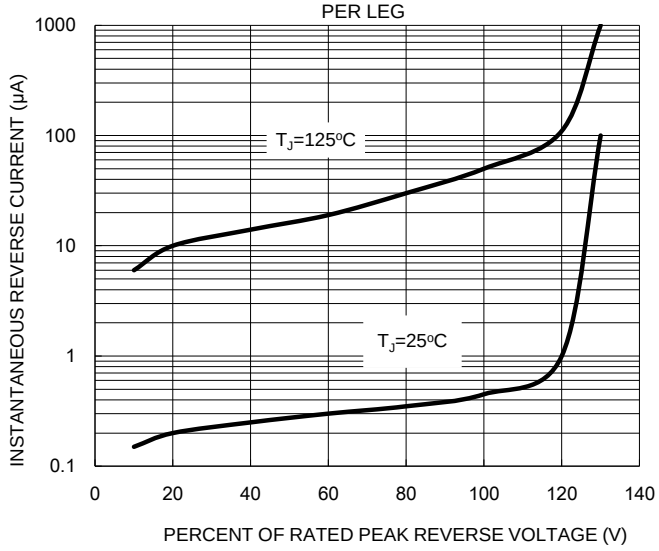
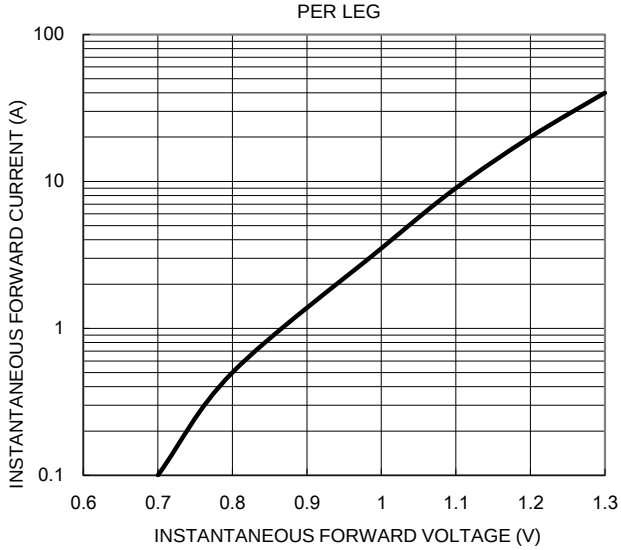


FIG. 4 TYPICAL FORWARD CHARACTERISTICS PER LEG



Device	Package	Shipping
KBU4005--KBU410	KBU	400 Units/Box