SEP ELECTRONIC CORP.

UG6KB05 thru UG6KB100

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - **50** to **1000**Volts

FORWARD CURRENT - **6.0** Amperes

D3K

FEATURES

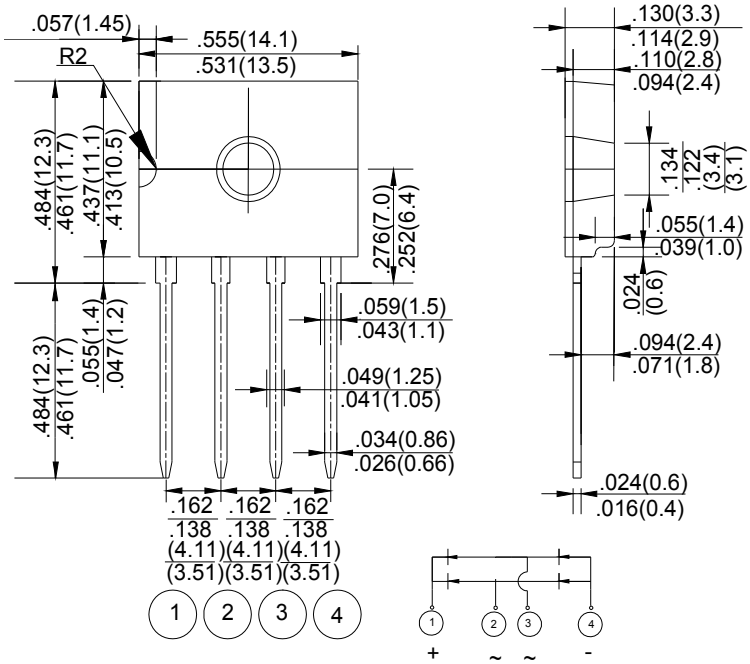
- Glass passivated chip junction
- High case dielectric strength
- High surge current capability

  Ideal for printed circuit board

MACHANICAL DATA

- Terminal:Plated leads solderable per MIL-STD 202E,

  Method 208C
- Case:UL-94 Class V-0 recognized Flane Retardant Epoxy
- Polarity:Polarity symbol marked on body
- Mounting position:any



Dimensions in inches and (milimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	UG6KB05	UG6KB10	UG6KB20	UG6KB40	UG6KB60	UG6KB80	UG6KB100	UNIT
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 Rectified Output Current @ T_C=138℃ (with heatsink)	$I_{(AV)}$	6							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	135							A
Maximum Forward Voltage at 2.0A DC	V_F	1.0							V
Maximum Forward Voltage at 4.0A DC	V_F	1.1							V
I^2t Rating for Fusing (t<8.3ms)	I^2t	75.63							A^2s
Typical Thermal Resistance without heatsink	$R_{\theta Ja}$	55							℃/W
with heatsink	$R_{\theta JC}$	1.5							℃/W
without heatsink	$R_{\theta JL}$	15							℃/W
Maximum DC Reverse Current @ T_a=25℃	I_R	10.0							μA
at Rated DC Blocking Voltage @ T_a=125℃	I_R	500							μA
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

NOTES:The typical data above is for reference only(典型值仅供参考).

FIG.1-DERATING CURVE OUTPUT
RECTIFIED CURRENT

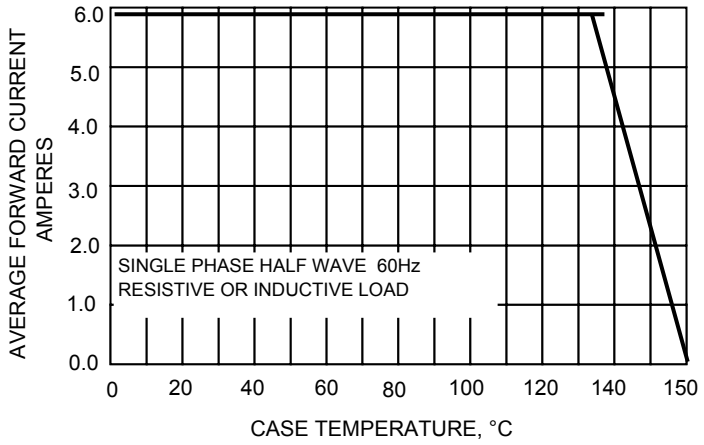


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

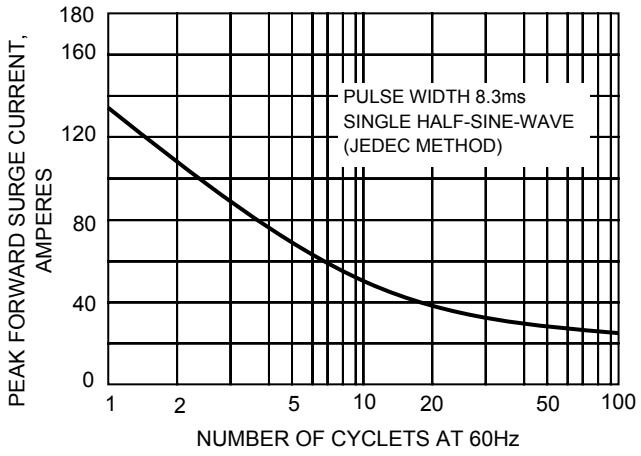


FIG.3-TYPICAL JUNCTION CAPACITANCE

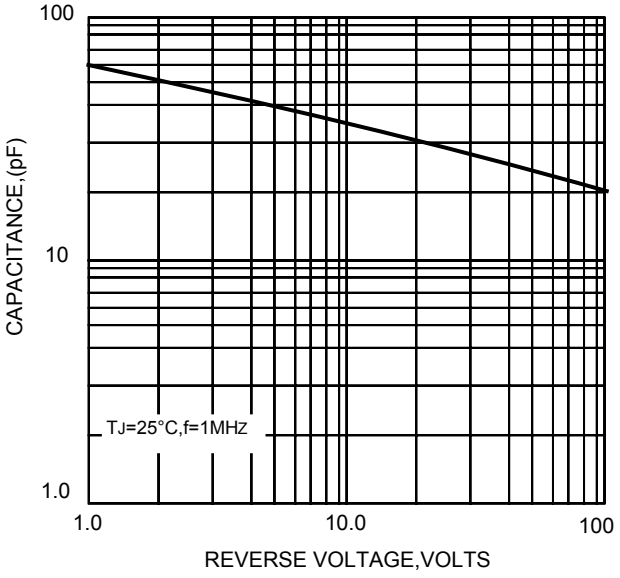


FIG.4-TYPICAL FORWARD CHARACTERISTICS

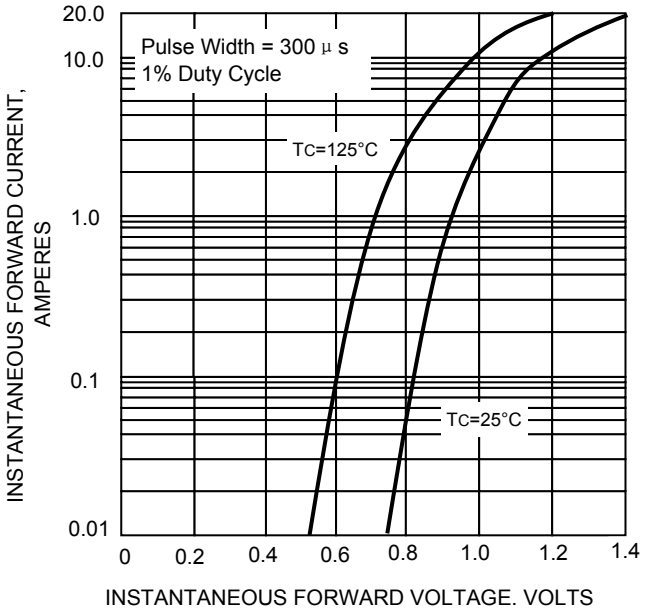
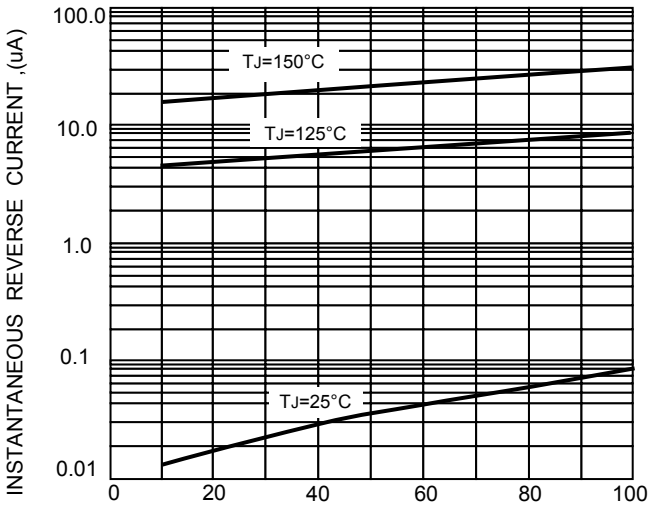


FIG.5-TYPICAL REVERSE CHARACTERISTICS



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!

REV. 6, 30-Dec-2014