产品规格承认书

客户名称
CUSTOMER: 三立电子（东莞）有限公司

客户料号
WARE PN:

产品名称
PRODUCT NAME: 桥式整流器 /BRIDGE RECTIFIERS

型号规格
MODEL DETAIL: GBP210 2A/1000V GBP

供应商
SUPPLIER: 东莞市纽航电子有限公司

制作/MAKE BY	审核/CHECKED BY	批准/APPROVE BY	送样日期/DATE
江小芬	邱·和平	李·小阳	2017年5月22日

客户承认/CUSTOMER APPROVE BY			
承认/TESTED BY	审核/CHECKED BY	批准/APPROVE BY	承认日期/DATE

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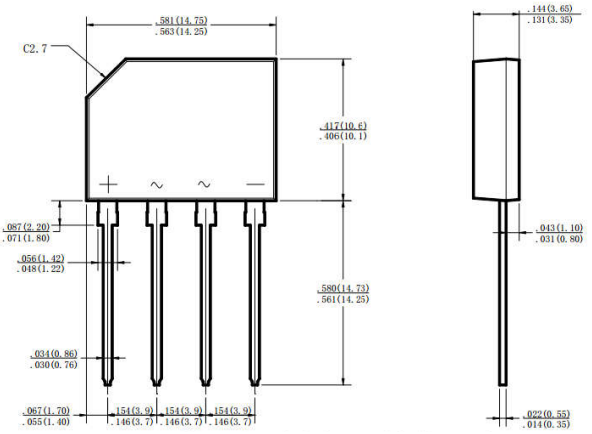
GBP2005 THRU GBP210

BRIDGE RECTIFIERS

Pb-Free ROHS COMPLIANT

VOLTAGE 50 THRU 1000 Volts **CURRENT** 2.0 Amperes

GBP Unit:Inch(mm)



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High surge current capability
- Ideal for printed circuit boards
- Glass passivated chip junction

MECHANICAL DATA

Case: Molded plastic body over passivated junctions

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

High temperature soldering guaranteed:

260℃/20 seconds

Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C(UNLESS OTHERWISE NOTED)

Absolute Maximum Ratings TL=25℃ unless otherwise specified.

Parameter	Symbol	GBP2005	GBP201	GBP202	GBP204	GBP206	GBP208	GBP210	Unit
Maximum repetitive 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 Ta=55℃	$I_{F(AV)}$	2.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							A
Rating for fusig (t<8.3ms)	I^2t	14.94							A^2sec
Typical junction capacitance per leg at 4.0V 1.0Mhz	CJ	25							pF
Operating junction temperature range	T_J	-55 to +150							℃
Storage temperature range	T_{STG}	-55 to +150							℃

Electrical Characteristics TL=25℃ unless otherwise specified.

Maximum instantaneous forward voltage drop per leg at 3.0A	VF	1.10	V
Maximum DC reverse current at Ta=25℃ rated DC blocking voltage per leg Ta=125℃	IR	10 500	μA
Typical thermal resistance per leg (1)	$R_{\theta JA}$ $R_{\theta JL}$	30 11	℃/W

Note

(1) Units mounted on PCB with 0.47×0.47(12×12mm) Copper Pads

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Pb-Free ROHS COMPLIANT

RATINGANDCHARACTERISTICCURVES

(TA=25°C(UNLESS OTHERWISE NOTED)

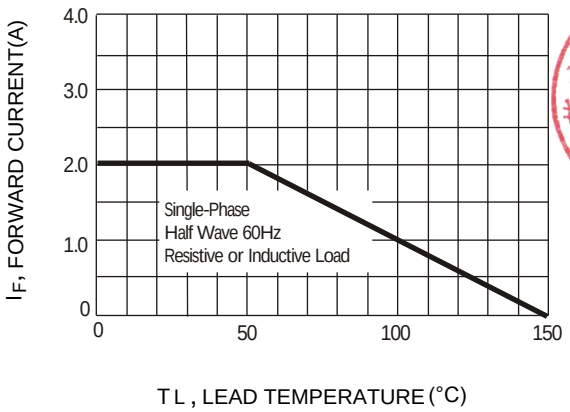


Fig.1-FORWARD CURRENT DERATING CURVE

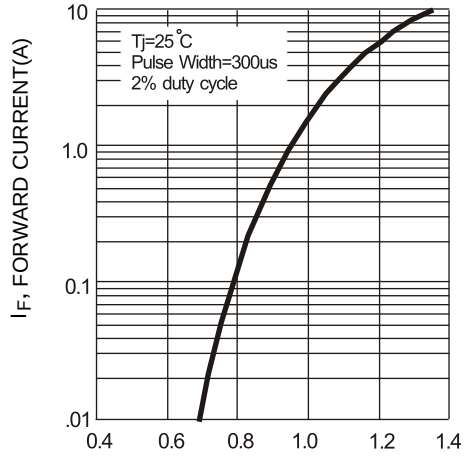


Fig.2-TYPEICAL FORWARD CHARACTERISTICS

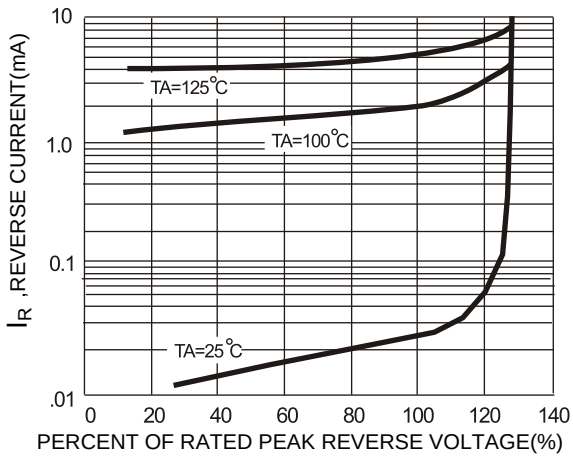


Fig.3-TYPICAL REVERSE CHARACTERISTICS

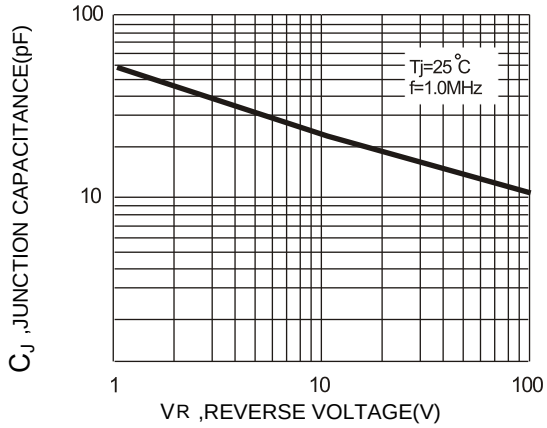


Fig.4-TYPICAL JUNCTION CAPACITANCE

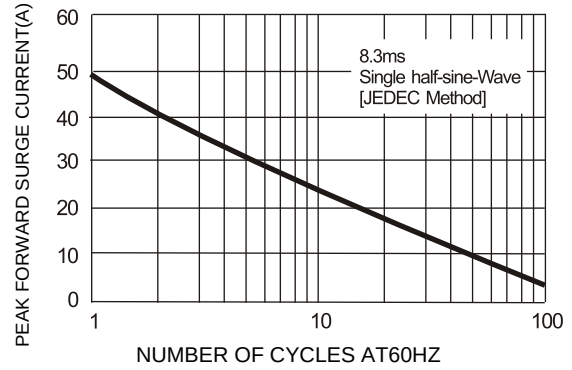


Fig.5-MAX. NON-REPETITIVE SURGE CURRENT

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Thermal Characteristcs (Ratings at 25℃ ambient temperature unless otherwise specified)

Parameter	Symbol	GBP	Unit
Typical thermal resistance 1)	$R_{\theta JA}$	30	℃/W
	$R_{\theta JL}$	11	

1.PCB Mounted with The Suggested PAD Size

ORDER INFORMATION

- Packing information

Product code	Pack	Quantity (pcs/box)	Box Size L×W×H (mm)	Carton Size L×W×H (mm)	Quantity (box/carton)
GBP2005 THRU GBP210 -GBP	B/P	500	200×35×200	405×205×215	10



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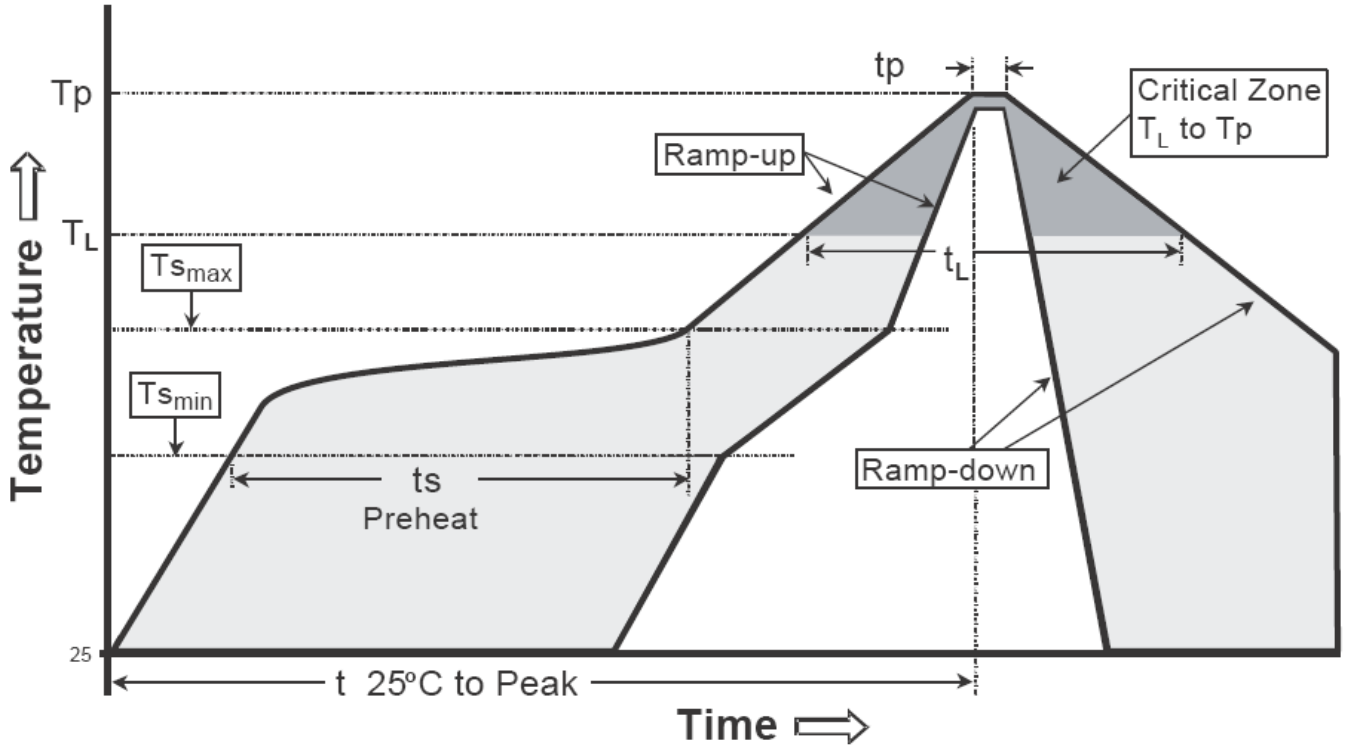
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Pb-Free ROHS COMPLIANT

Recommended wave soldering condition

Product	Peak Temperature	Soldering Time
Pb-free devices	260 +0/-5 °C	5 +1/-1 seconds

Recommended temperature profile for IR reflow



Profile feature	Sn-Pb eutectic Assembly	Pb-free Assembly
Average ramp-up rate (Tsmax to Tp)	3°C/second max.	3°C/second max.
Preheat −Temperature Min(Ts min) −Temperature Max(Ts max) −Time(ts min to ts max)	 100°C 150°C 60-120 seconds	 150°C 200°C 60-180 seconds
Time maintained above: −Temperature (TL) − Time (tL)	 183°C 60-150 seconds	 217°C 60-150 seconds
Peak Temperature(TP)	240 +0/-5 °C	260 +0/-5 °C
Time within 5°C of actual peak temperature(tp)	10-30 seconds	20-40 seconds
Ramp down rate	6°C/second max.	6°C/second max.
Time 25 °C to peak temperature	6 minutes max.	8 minutes max.

Note : All temperatures refer to topside of the package, measured on the package body surface.

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