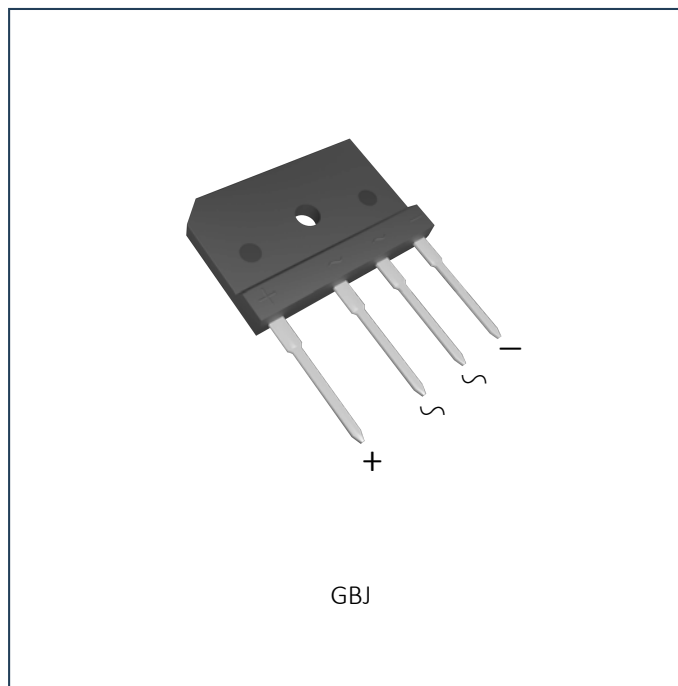


GBJ1510

标准整流桥

Standard Bridge Rectifier

封装外形 Package



产品特点 Features

- 玻璃钝化芯片
Glass passivated chip
- 高浪涌电流能力
High surge current capability
- 低漏电流
Low leakage current
- 符合 RoHS 指令 2011/65/EU
Compliant to RoHS directive 2011/65/EU
- 焊料浸渍温度最高为 275°C，持续 7 秒
Solder dip 275 °C max. 7 s

主要参数 Device summary

Symbol	Value
$I_F(AV)$	15A
V_{RRM}	1000V
$V_F(typ)$	0.85V@7.5A 125°C
$I_R(typ)$	0.04mA@1000V 125°C
$T_{j(max)}$	150°C

机械数据 Mechanical Data

- 模塑料符合 UL 94 V-0 易燃等级，符合 RoHS 标准
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- 端子：镀锡引线，可焊接 J-STD-002 和 JESD22-B102
Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- 极性：本体标记
Polarity: As marked on body

最大额定值 Maximum ratings(Ta=25°C)

项目 Parameter	符号 Symbol	数值 Value	单位 Unit
反向电压 Peak repetitive reverse voltage	VRRM	1000	V
正向电流 Forward current	IF	带散热片 Tc=110°C With heatsink Tc=110°C 15	A
		不带散热片 Tc=25°C Without heatsink Tc=25°C 3.2	
浪涌电流 Non-repetitive single pulse surge current t=8.3ms	IFSM	225	A
结温 Junction temperature	Tj	-55~+150	°C
存储温度 Storage temperature	TSTG	-55~+150	°C
绝缘电压 (端子至外壳交流 1 分钟) Dielectric strength(terminal to case AC 1 minute)	Vdis	2500	V
安装扭矩 Mounting torque@Recommend torque: 5kg·cm	Tor	8	kg·cm

电特性 Electrical characteristics(Ta=25°C)

项目 Parameter	测试条件 Tests conditions		数值 Value			单位 Unit
			最小值 (min)	典型值 (typ)	最大值 (max)	
反向电压 VRRM	IR=0.05mA		1000	-	-	V
反向漏电 IR	Tj=25°C	VR=VRRM	-	-	0.006	mA
	Tj=125°C		-	-	0.2	
正向电压 VF	Tj=25°C	IF=7.5A	-	-	1.1	V
	Tj=100°C	IF=1A	-	0.74	-	
		IF=7.5A	-	0.88	-	
	Tj=125°C	IF=1A	-	0.71	-	
		IF=7.5A	-	0.85	-	
		IF=7.5A	-	-	-	

热特性 Thermal characteristics(Ta=25°C)

项目 Parameter	符号 Symbol	数值 Value	单位 Unit
结到环境热阻 (无散热片) Junction to ambient thermal resistance(without heatsink)	Rth(j-a)	19	°C/W
结到管壳热阻 (有散热片) Thermal resistance from junction to case(with heatsink)	Rth(j-c)	1.5	°C/W

典型特征图 Typical Characteristics

图 1: 正向电流与外壳温度

度 FIG 1:IF-Tc

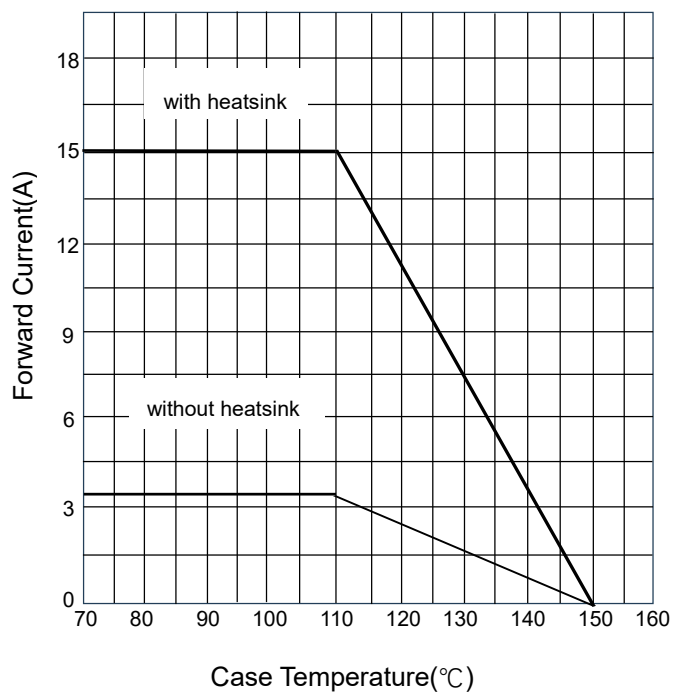


图 2: 正向浪涌循环次数

FIG 2: Surge Forward Current Capability

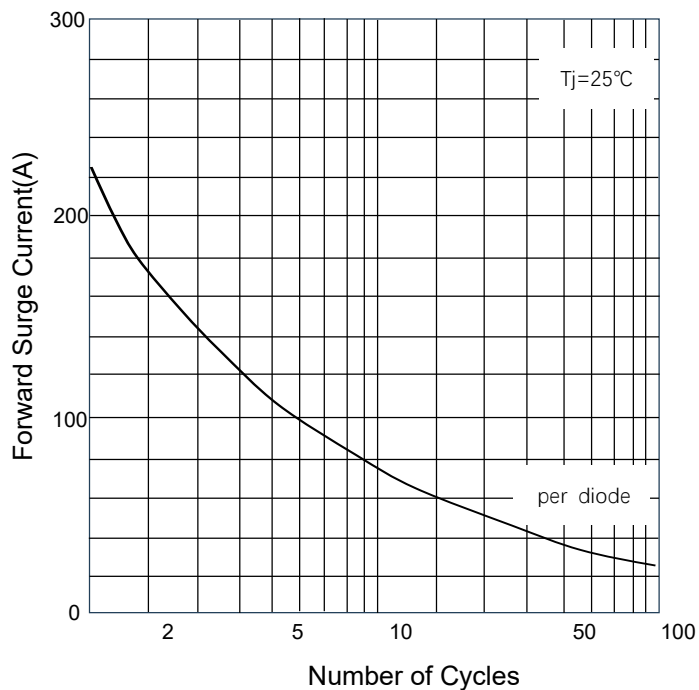


图 3: 反向电压与反向电流

FIG 3:VR-IR

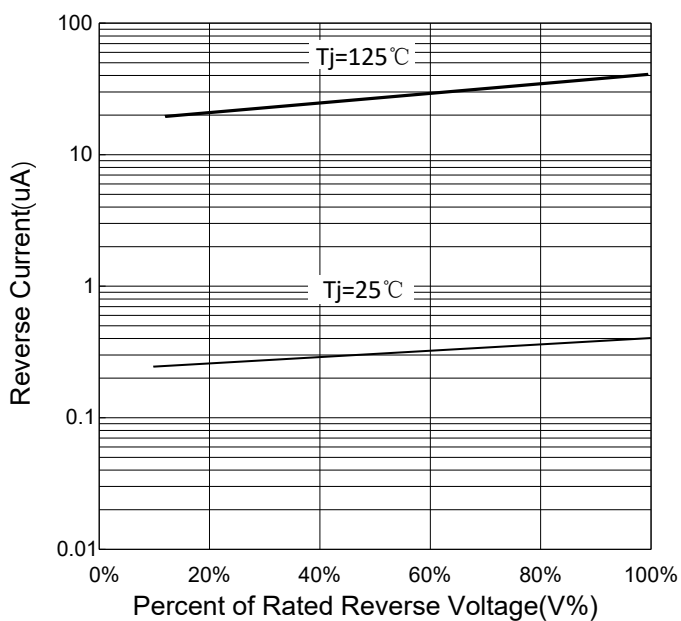
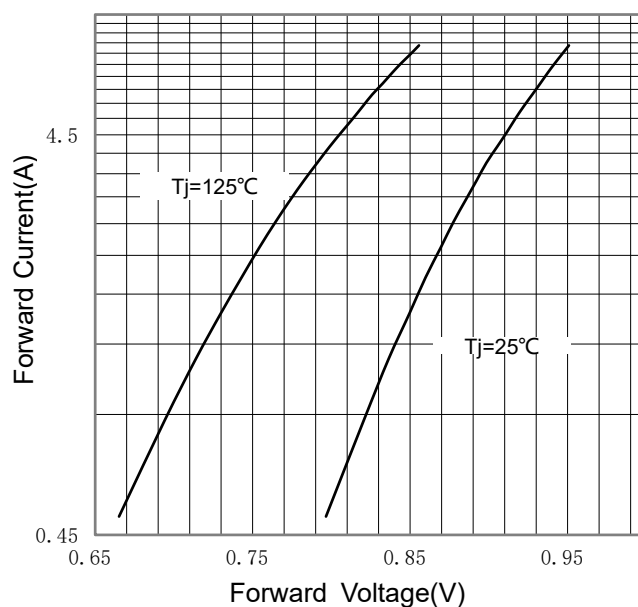


图 4: 正向电流与正向电压

FIG 4:IF-VF



外形尺寸 Outline Dimensions

GBJ

The image shows a technical drawing of a GBJ component. The top view (left) is a rectangle with a central circular feature. Dimensions A, B, C, D, E, F, G, H, I, J, K, L, and M are indicated. The side view (right) shows the profile of the component with dimensions J, L, and M. The top view includes a central circular feature with a crosshair, and a horizontal line with a '+' sign on the left, a '~' in the middle, and a '-' sign on the right. The side view shows a rectangular profile with a central slot and a small protrusion at the bottom.

Dim	Min	Typ	Max
A	29.50	30.00	30.50
B	8.80	9.00	9.20
C	3.10	3.25	3.40
D	19.50	20.00	20.50
E	3.70	4.00	4.30
F	2.00	2.20	2.40
G	0.90	1.00	1.10
H	17.00	17.50	18.00
I	7.30	7.50	7.70
J	4.40	4.60	4.80
K	9.80	10.00	10.20
L	3.10	3.40	3.10
M	0.50	0.60	0.70

尺寸单位: (mm)

Dimensions in millimeters

GBJ-C40

The image shows a technical drawing of a GBJ-C40 component. It includes a top view and a side view. The top view shows a rectangular component with a central circular feature labeled 'C'. Dimensions A, B, C, D, E, F, G, H, I, J, K, L, and M are indicated. The side view shows the profile of the component with dimensions J, L, and M. The component has four pins on the bottom, with dimensions F, G, and K indicating pin details. The top view also shows a central circular feature with a crosshair, and a small '+' sign on the left and a '-' sign on the right. The side view shows a rectangular profile with a central slot and a small protrusion at the bottom.

Dim	Min	Typ	Max
A	29.50	30.00	30.50
B	8.80	9.00	9.20
C	3.10	3.25	3.40
D	19.50	20.00	20.50
E	3.70	4.00	4.30
F	2.00	2.20	2.40
G	0.90	1.00	1.10
H	7.80	8.00	8.20
I	7.30	7.50	7.70
J	4.40	4.60	4.80
K	9.80	10.00	10.20
L	3.10	3.40	3.10
M	0.50	0.60	0.70

尺寸单位: (mm)

Dimensions in millimeters

GBJ-D35

The image shows a technical drawing of a GBJ-D35 component. It includes a top view and a side view. The top view shows a rectangular component with a central circular feature labeled 'C'. Dimensions A, B, D, F, I, K, and L are indicated. The side view shows the profile of the component with dimensions J, L, and M. The component has four pins at the bottom, with dimensions I and K indicating the spacing between them. The top view also shows a series of symbols: a plus sign (+), two tilde symbols (~), and a minus sign (-).

Dim	Min	Typ	Max
A	29.50	30.00	30.50
B	8.80	9.00	9.20
C	3.10	3.25	3.40
D	19.50	20.00	20.50
F	2.00	2.20	2.40
H	3.10	3.50	3.90
I	7.30	7.50	7.70
J	4.40	4.60	4.80
K	9.80	10.00	10.20
L	3.10	3.40	3.10
M	0.50	0.60	0.70

尺寸单位: (mm)

Dimensions in millimeters

订购信息 Ordering Information

订单型号 Order code	印记 Marking	封装 Package	重量 Weight (g)	包装形式 Packing	基本包装 Base qty (pcs)	盒 Box (pcs)	箱 Carton (pcs)
CGBJ1510000B	GBJ1510	GBJ	7.1	盒装 Box	250	250	2000
CGBJ1510C40B	GBJ1510	GBJ	7.0	盒装 Box	250	250	2000
CGBJ1510D35B	GBJ1510	GBJ	7.0	盒装 Box	250	250	2000

注 note:

- *. "C40"为短脚，详见外形尺寸。"C40" means short pin, the size is shown in the Outline Dimensions.
- *. "D35"为短脚，详见外形尺寸。"D35" means short pin, the size is shown in the Outline Dimensions.

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