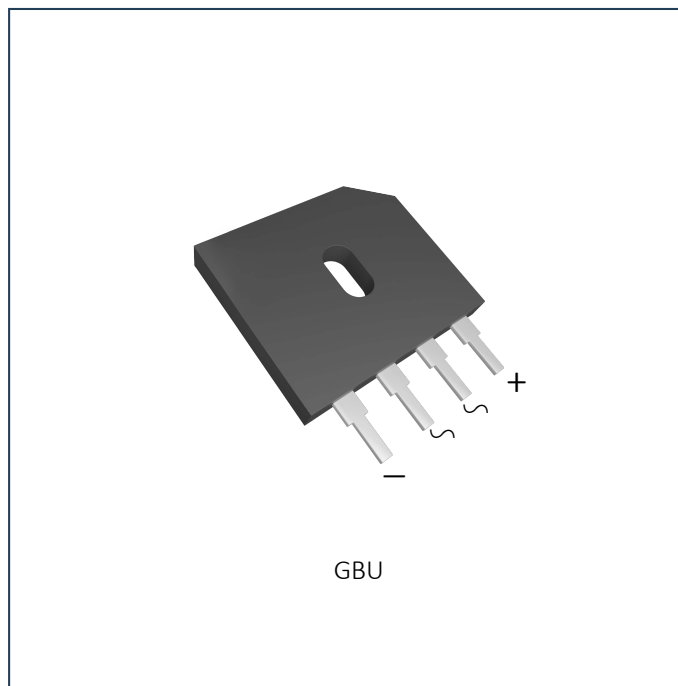


GBU2504H

快恢复桥式整流器

Fast Recovery Bridge Rectifier

封装外形 Package



机械数据 Mechanical Data

- 超快恢复时间 Ultra-fast recovery time
- 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
$I_F(AV)$	25A
V_{RRM}	400V
$V_F(typ)$	0.90V@12.5A 125°C
$I_R(typ)$	0.05mA@400V 125°C
$T_J(max)$	150°C

产品特点 Features

- 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
反向重复峰值电压 Peak repetitive reverse voltage	VRRM	400	V
正向电流 Forward current	IF	带散热片 Tc=110°C With heatsink Tc=110°C 25	A
		不带散热片 Tc=25°C Without heatsink Tc=25°C 3	
浪涌电流 Non-repetitive single pulse surge current t=8.3ms	IFSM	200	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(terminals 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)	
VRRM 反向电压	IR=0.05mA		400	-	-	V
IR 反向漏电	Tj=25°C	VR=VRRM	-	-	0.03	mA
	Tj=125°C		-	-	0.75	
VF 正向电压	Tj=25°C	IF=12.5A	-	-	1.3	V
	Tj=100°C	IF=6.25A	-	0.99	-	
		IF=12.5A	-	0.94	-	
	Tj=125°C	IF=6.25A	-	0.78	-	
		IF=12.5A	-	0.90	-	
Trr 反向恢复时间	Tj=25°C	Reverse recovery condition IF=0.5A, IR=1.0A, Irr=0.25A	-	-	60	nS

热特性 Thermal characteristics(Ta=25°C)

Parameter	Symbol	Value	Unit
结到环境热阻 (无散热片) Junction to ambient thermal resistance(without heatsink)	Rth(j-a)	20	°C/W
结到管壳热阻 (有散热片) Thermal resistance from junction to case(with heatsink)	Rth(j-c)	1.2	°C/W

典型特征图 Typical Characteristics

图 1: 正向电流与外壳温度

FIG 1: I_F - T_C

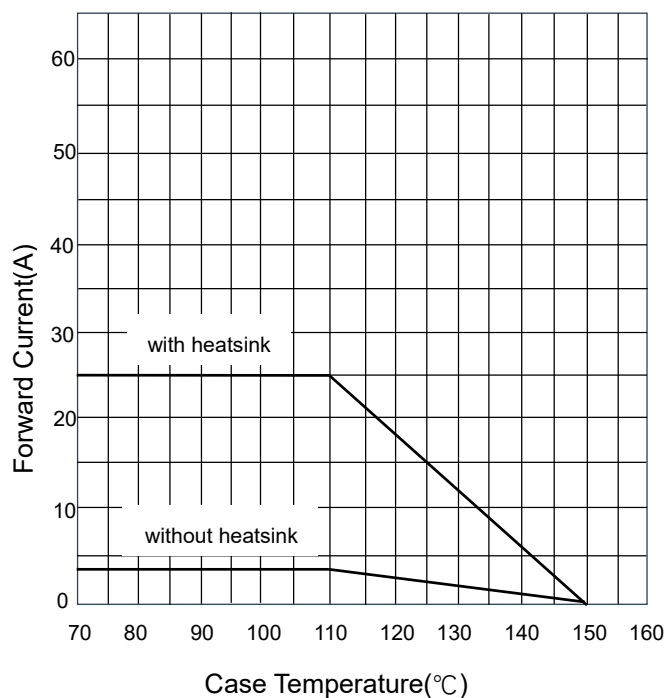


图 2: 正向浪涌循环次数

FIG 2: Surge Forward Current Capability

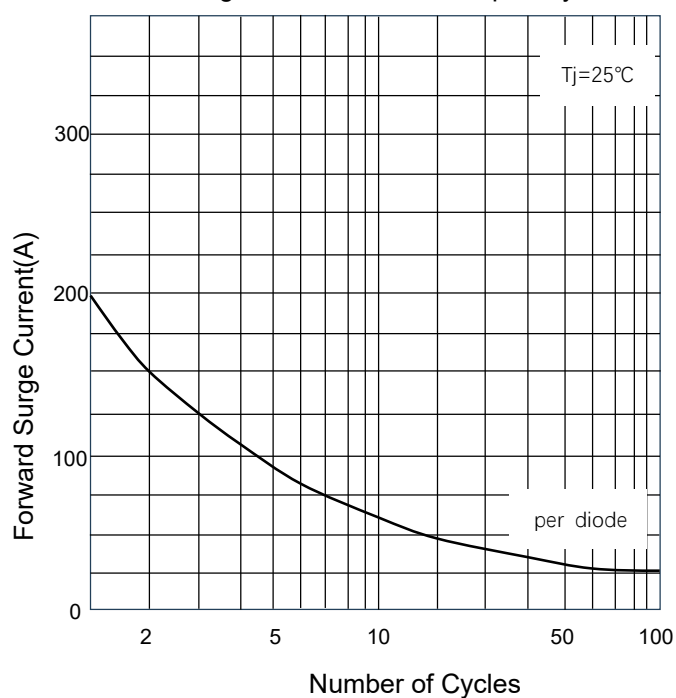


图 3: 反向电压与反向电流

FIG 3: V_R - I_R

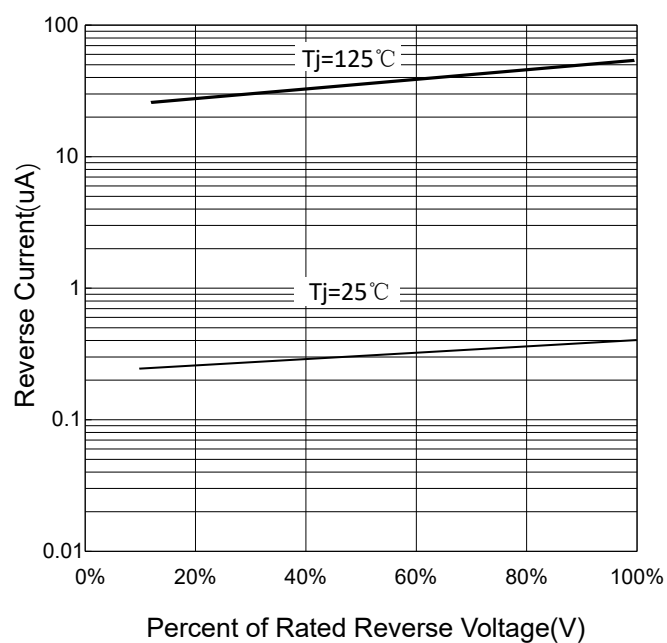
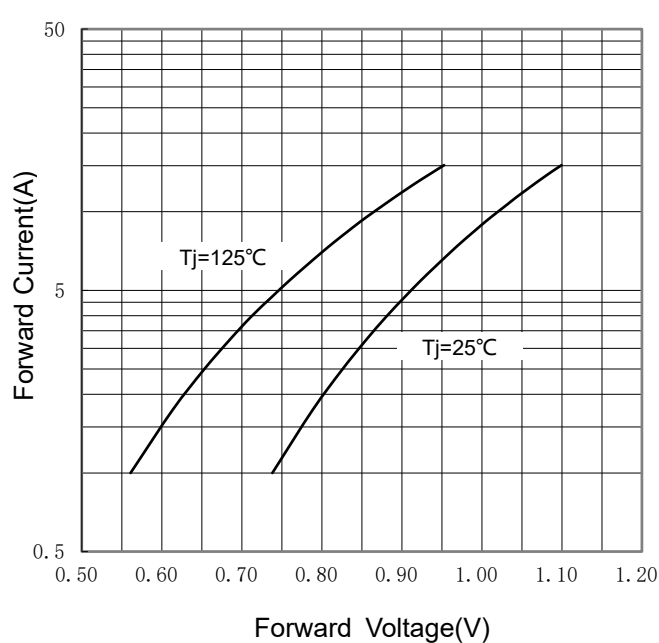
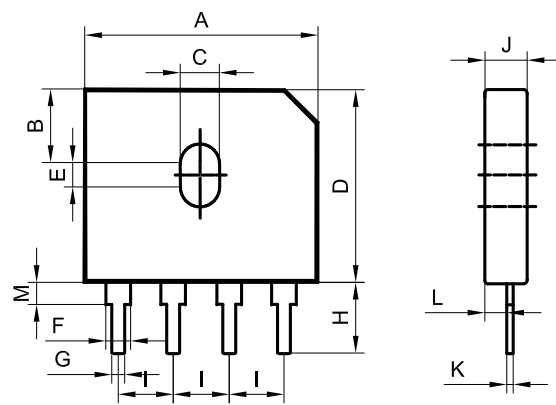


图 4: 正向电流与正向电压

FIG 4: I_F - V_F



外形尺寸 Outline Dimensions

GBU-C40		Dim	Min	Typ	Max
		A	21.80	22.00	22.20
		B	7.60	7.80	8.00
		C	3.50	3.80	4.10
		D	18.30	18.50	18.70
		E	1.70	1.90	2.10
		F	2.05	2.30	2.55
		G	1.00	1.15	1.30
		H	5.90	6.20	6.50
		I	4.90	5.00	5.10
		J	3.30	3.40	3.50
		K	0.35	0.45	0.55
		L	1.90	2.10	2.30
		M	1.90	2.2	2.50
		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)
CGBU2504HC40B	GBU2504H	GBU	3.8	盒装 Box	250	250	5000

注 note:

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

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