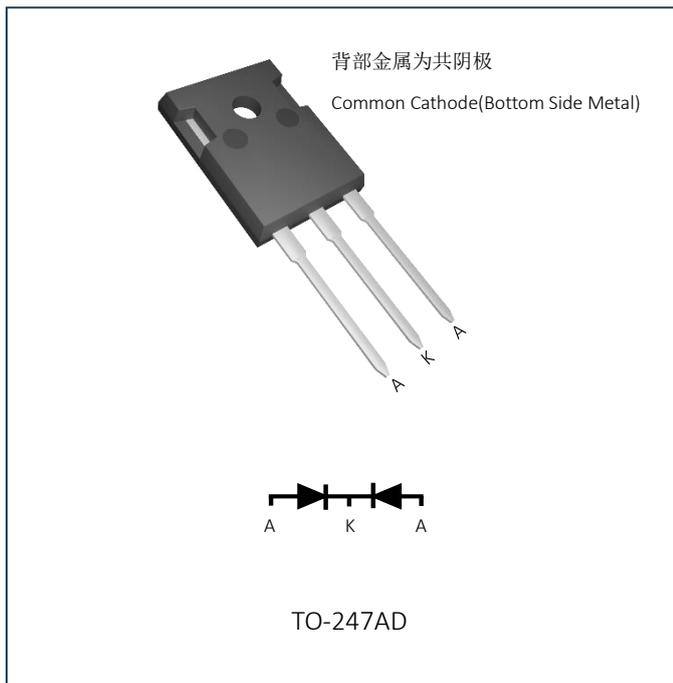


肖特基整流

## SCHOTTKY BARRIER RECTIFIER

### 封装外形 Package



### 主要参数 Device summary

Symbol	Value
$I_F(AV)$	60A
$V_{RRM}$	200V
$V_F(\text{typ})$	0.77V@30A 125°C
$I_R(\text{typ})$	3mA@ $V_{RRM}$ 125°C
$T_{j(\text{max})}$	175°C

### 产品特点 Features

- 高频运行能力 High frequency operation
- 低正向压降 Low Forward Voltage
- 低反向电流 Low Reverse 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

### 产品应用 Typical Applications

开关电源，充电器，逆变器，续流二极管和电池反向保护等。

Typical applications are in switching power supplies, charger, inverters, freewheeling diodes and reverse battery protection.

### 机械数据 Mechanical Data

- 模塑料符合 UL94 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
- 重量：约 6.0 克/5.8 克（短脚）  
Weight: Approximate 5.8g/5.2g(short pin)

### 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	200	V
正向电流 Forward current	IF	60 30×2	A
浪涌电流 Non-repetitive single pulse surge current t=8.3ms	IFSM	400	A
结温 Junction temperature	Tj	-55~+175	°C
存储温度 Storage temperature	TSTG	-55~+175	°C

### 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		200	-	-	V
IR 反向漏电	Tj=25°C	VR=VRRM	-	-	10	μA
	Tj=125°C		-	-	10	mA
VF 正向电压	Tj=25°C	IF=30A	-	-	0.95	V
	Tj=100°C	IF=10A	-	0.66	-	
		IF=15A	-	0.71	-	
	Tj=125°C	IF=10A	-	0.63	-	
		IF=15A	-	0.68	-	

### 热特性 Thermal characteristics(Ta=25°C)

Parameter	Symbol	Value	Unit
结到外壳热阻 Thermal resistance from junction to case	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:IF-Tc

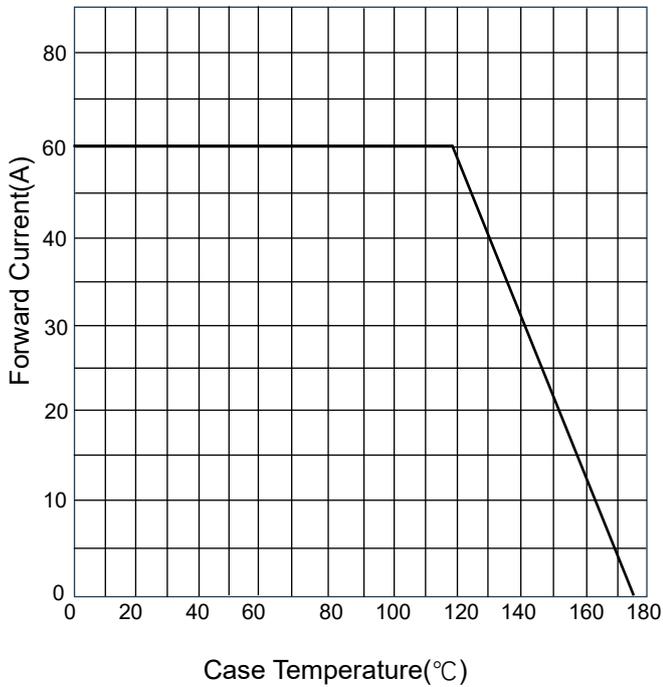


图 2: 正向浪涌循环次数

FIG 2:Surge Forward Current Capability

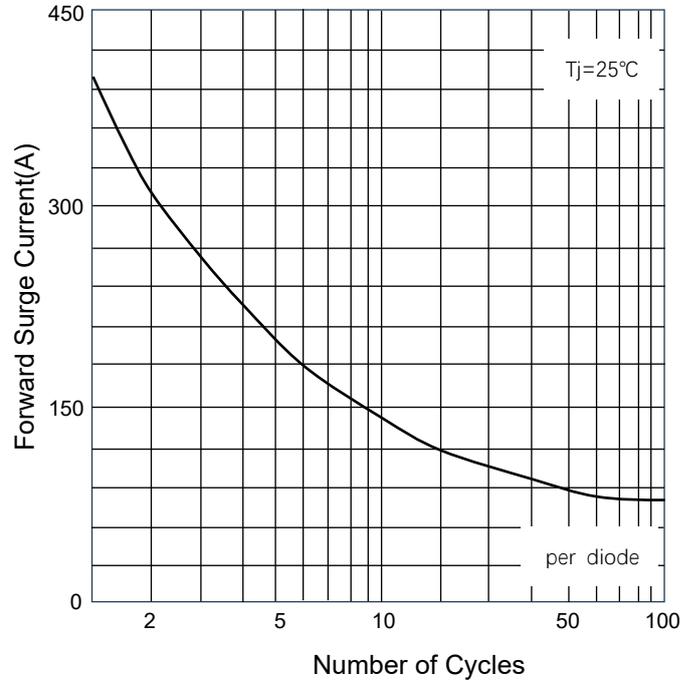


图 3: 反向电压与反向电流

FIG 3:VR-IR

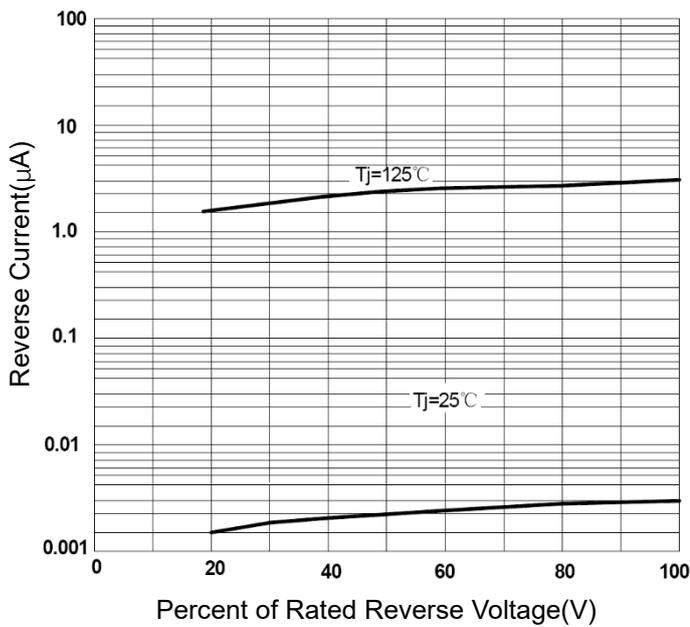
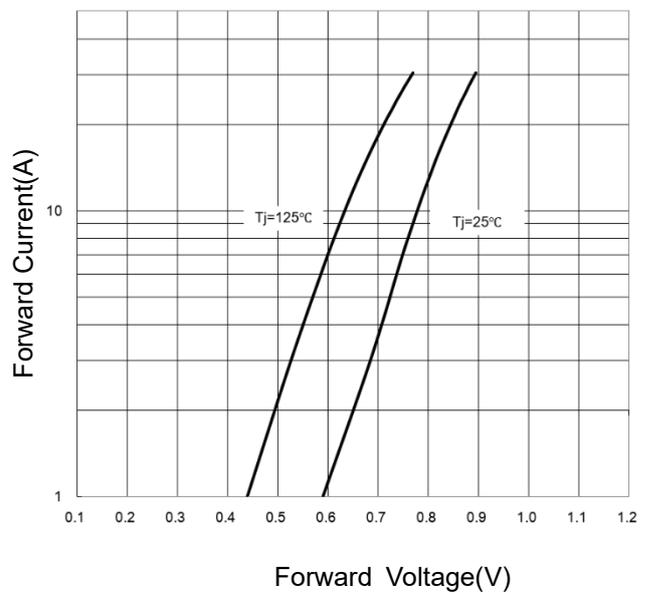
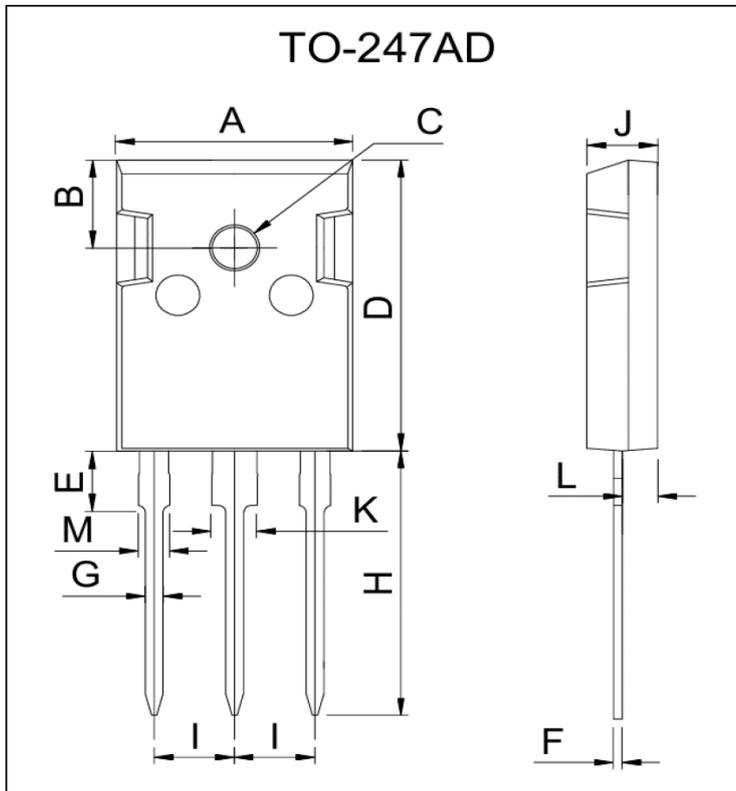


图 4: 正向电流与正向电压

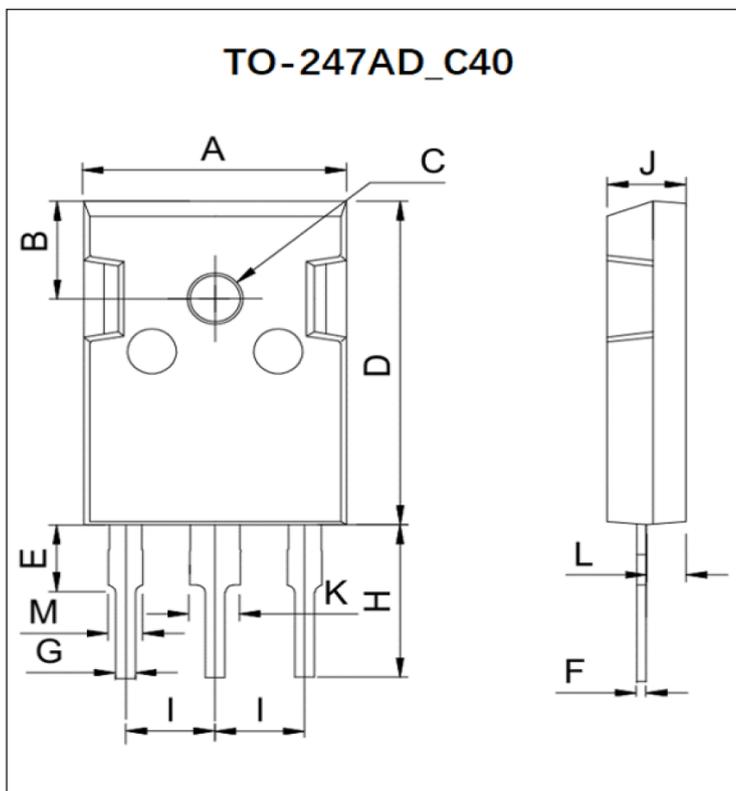
FIG 4:IF-VF



外形尺寸 Outline Dimensions



TO-247AD <sub>(mm)</sub>			
Dim	Min	Typ	Max
A	15.80	16.00	16.20
B	6.30	6.50	6.70
C	3.05	3.20	3.35
D	21.20	21.50	21.80
E	3.80	4.00	4.20
F	0.50	0.60	0.70
G	1.00	1.20	1.40
H	19.20	19.50	19.70
I	5.35	5.45	5.60
J	4.60	4.80	5.00
K	2.90	3.10	3.30
L	2.20	2.40	2.60



TO-247AD_C40 <sub>(mm)</sub>			
Dim	Min	Typ	Max
A	15.80	16.00	16.20
B	6.30	6.50	6.70
C	3.05	3.20	3.35
D	21.20	21.50	21.80
E	3.80	4.00	4.20
F	0.50	0.60	0.70
G	1.00	1.20	1.40
H	7.80	8.00	8.20
I	5.35	5.45	5.60
J	4.60	4.80	5.00
K	2.90	3.10	3.30
L	2.20	2.40	2.60

## 订购信息 Ordering Information

订单型号 Order code	印记 Marking	包装形式 Delivery Mode	基本包装 Min PKG (pcs)	盒 Box pcs	箱 Carton pcs	重量 Weight Kg
MBR60200PTG	MBR60200PT	管装 Tube	30	600	2400	19.1
MBR60200PTH						18.6
MBR60200PTGC40						
MBR60200PTH40						

注 note:

1. “C40”为短脚，详见外形尺寸。“C40” is short pin, the size is shown in the Outline Dimensions.
2. “G”为无铅版本，“H”为无卤版本。“G” is Lead-free version, “H” is Halogen-free version.

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