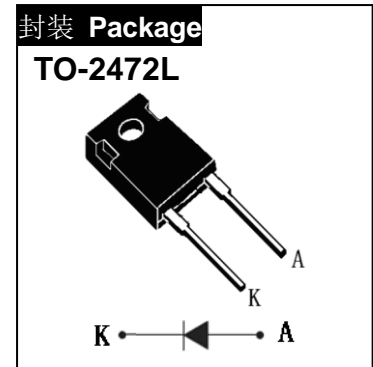


# ADH60E60L

## 主要参数 MAIN CHARACTERISTICS

$I_F(AV)$	60A
$V_{RRM}$	600 V
$V_F(typ)$	1.6V
$T_{rr} (typ)$	40ns



## 用途

- 吸收回路
- 开关电源
- 高频开关器件并联二极管

## APPLICATIONS

- Snubber diode
- Switch power supply
- Antiparalle Diode for high frequency switching devices

## 产品特性

- 超快恢复时间
- 低恢复损耗
- 低正向压降
- 低漏电流

## FEATURES

- Ultrafast Recovery Time
- Low Recovery Loss
- Low Forward Voltage
- Low Leakage Current

## 订货信息 ORDER MESSAGE

订货型号 Order codes		印记 Marking	封装 Package
有卤-条管 Halogen-Tube	无卤-条管 Halogen Free-Tube		
ADH60E60L-GL-B	ADH60E60L-GL-BR	ADH60E60L	TO-2472L

**绝对最大额定值 ABSOLUTE RATINGS (Tc=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	V <sub>RRM</sub>	600	V
平均正向整流电流 T <sub>C</sub> =135°C Average Forward Rectified Current	I <sub>F(AV)</sub>	60	A
非重复浪涌正向电流 Non-Repetitive Surge Forward Current t=8.3ms	I <sub>FSM</sub>	480	A
雪崩能量 Avalanche Energy(per diode) (L=40mH)	E <sub>AVL</sub>	20	mJ
结温 Junction Temperature	T <sub>j</sub>	-55~+175	°C
存储温度 Storage temperature range	T <sub>STG</sub>	-55~+175	°C

**电特性 ELECTRICAL CHARACTERISTICS (Tc=25°C unless otherwise specified)**

项 目 Parameter	测试条件 Tests conditions		最小值 Value(min)	典型值 Value(typ)	最大值 Value(max)	单位 Unit
V <sub>R</sub>	I <sub>R</sub> =50μA		600	-	-	V
I <sub>R</sub>	T <sub>j</sub> =25°C	V <sub>R</sub> =V <sub>RRM</sub>	-	-	10	μA
	T <sub>j</sub> =125°C		-	-	800	μA
V <sub>F</sub>	T <sub>j</sub> =25°C	I <sub>F</sub> =60A	-	1.6	2.3	V
	T <sub>j</sub> =125°C		-	-	2.0	V
trr	I <sub>F</sub> =0.5A, I <sub>R</sub> =1A, I <sub>RR</sub> =0.25A		-	45	55	ns
trr	I <sub>F</sub> =1A, V <sub>R</sub> =30V, di <sub>F</sub> /dt=-100A/μs		-	-	45	ns
trr	I <sub>F</sub> =60A, V <sub>R</sub> =200V, di <sub>F</sub> /dt=-200A/μs T <sub>C</sub> =25°C		-	27	-	ns
Qrr			-	33	-	nc
I <sub>RRM</sub>			-	1.5	-	A
trr	I <sub>F</sub> =60A, V <sub>R</sub> =200V, di <sub>F</sub> /dt=-200A/μs T <sub>C</sub> =125°C		-	91	-	ns
Qrr			-	173	-	nc
I <sub>RRM</sub>			-	3.8	-	A

**热特性 THERMAL CHARACTERISTICS (maximum)**

项 目 Parameter	符 号 Symbol	最大值 Value(max)	单 位 Unit
结到管壳的热阻 Thermal Resistance Junction to Case	R <sub>th(j-c)</sub>	0.34	°C/W

特征曲线 ELECTRICAL CHARACTERISTICS (curves)

Fig.1 TYPICAL FORWARD CHARACTERISTICS

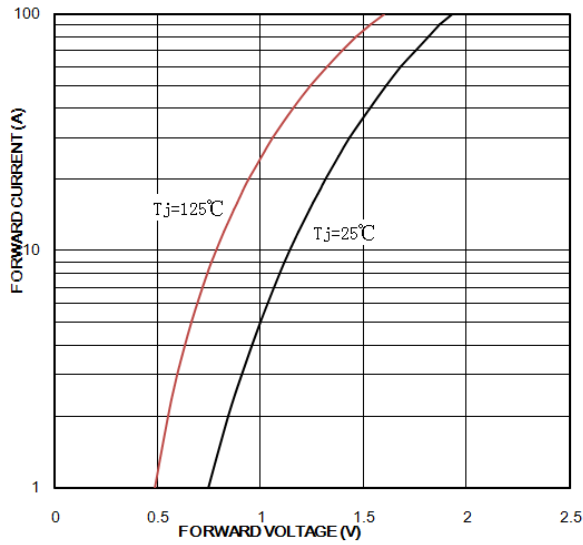


Fig.2 TYPICAL REVERSE CHARACTERISTICS

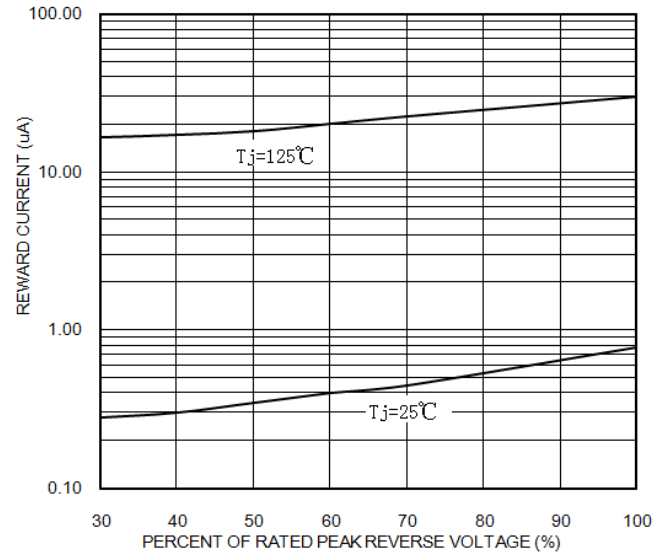


Fig.3 TYPICAL JUNCTION CAPACITANCE

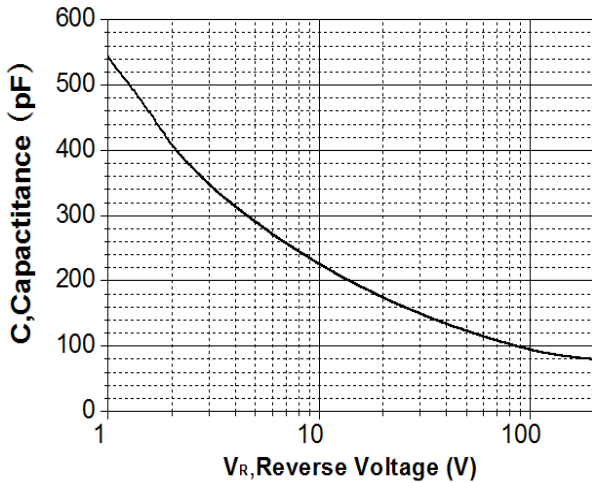


Fig.4 Reverse recovery time versus di/dt

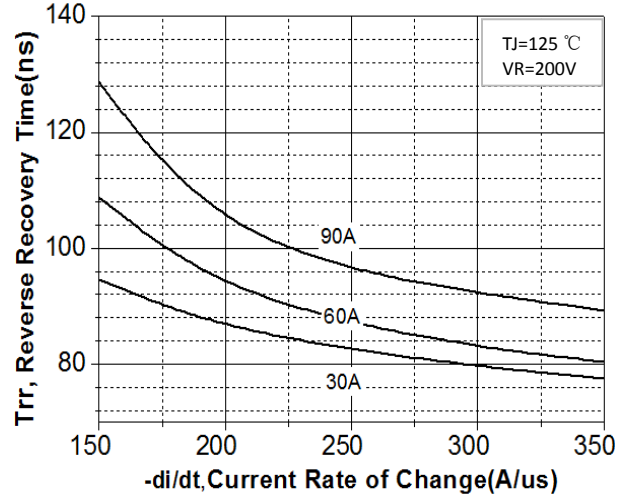


Fig.5 Reverse recovery charges versus di/dt

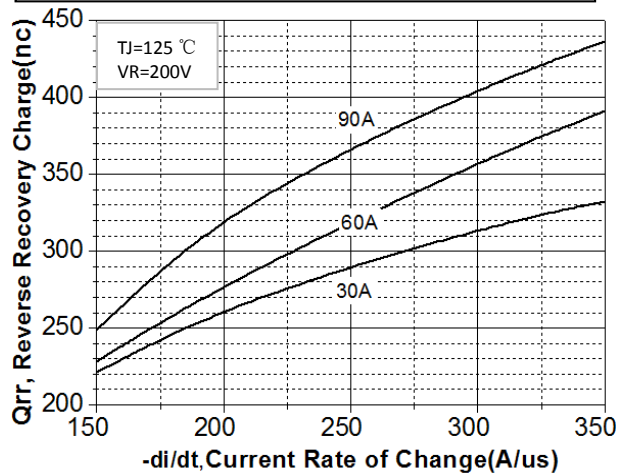


Fig.6 Peak reverse recovery current versus di/dt

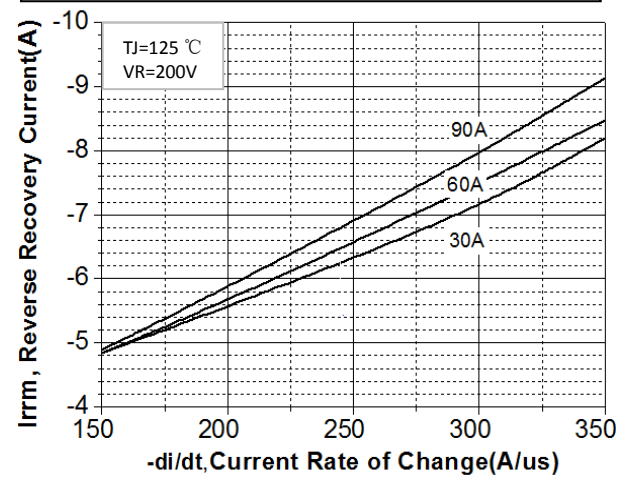


Fig.7 FORWARD CURRENT DERATING CURVE

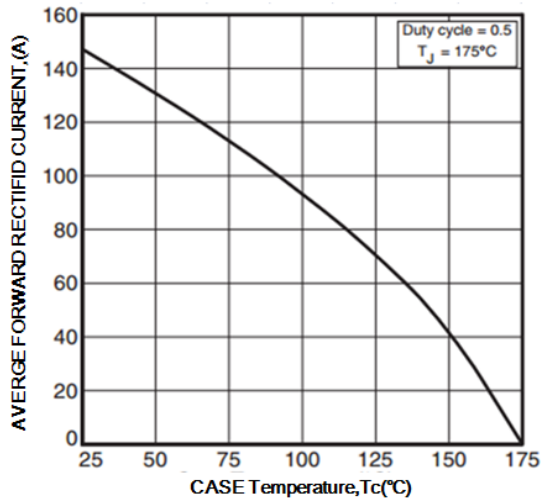
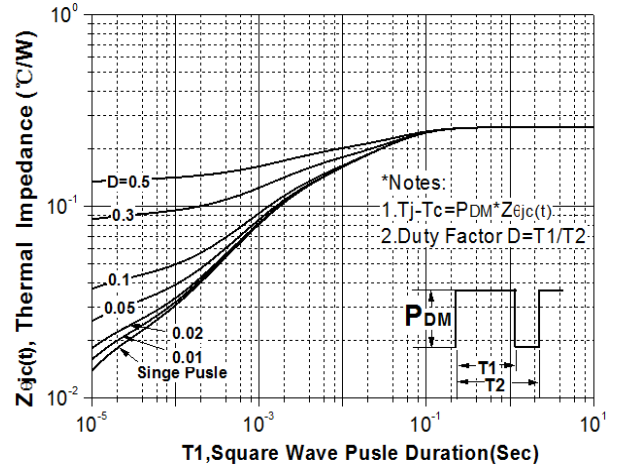


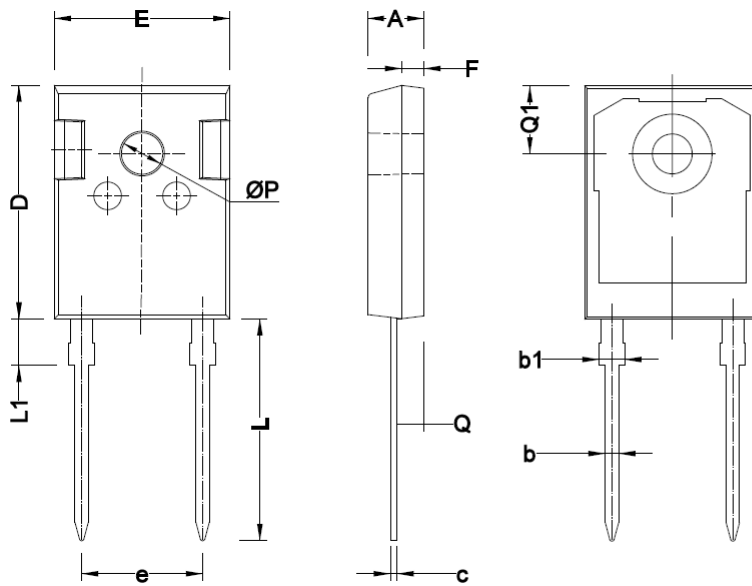
Fig.8 Transient Thermal Response Curve



外形尺寸 PACKAGE MECHANICAL DATA

TO-247 2L

单位 Unit : mm

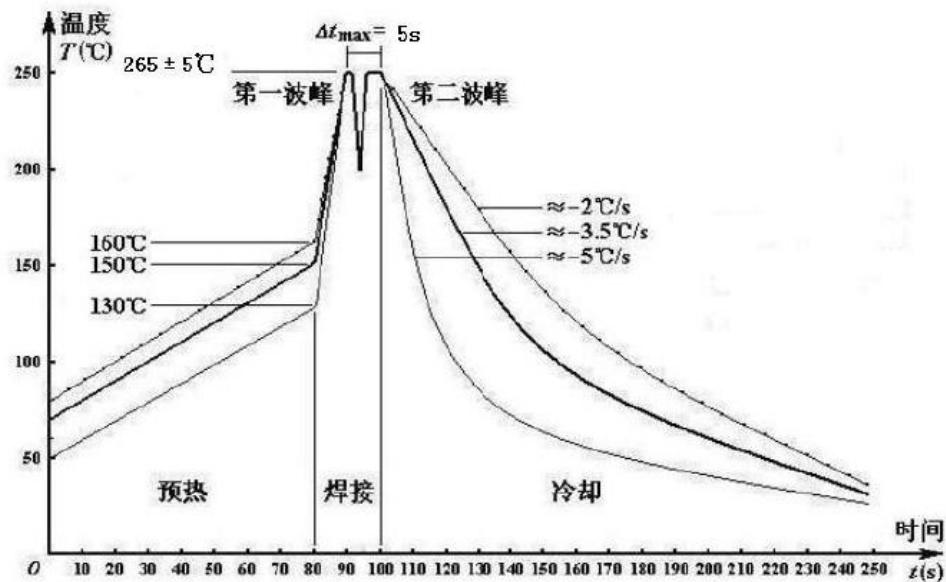


SYMBOL	MM	
	MIN	MAX
A	4.80	5.20
b	1.10	1.30
b1	1.95	2.25
c	0.50	0.70
D	20.80	21.20
E	15.60	16.00
F	1.85	2.15
e	10.73	11.03
L	19.62	20.22
L1	3.93	4.33
ØP	3.40	3.80
Q	2.26	2.56
Q1	6.00	6.40

焊接方式：波峰焊

焊接工艺曲线

wave soldering



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