

CURRENT 45 Ampere
VOLTAGE RANG 800 to 1600 Volts

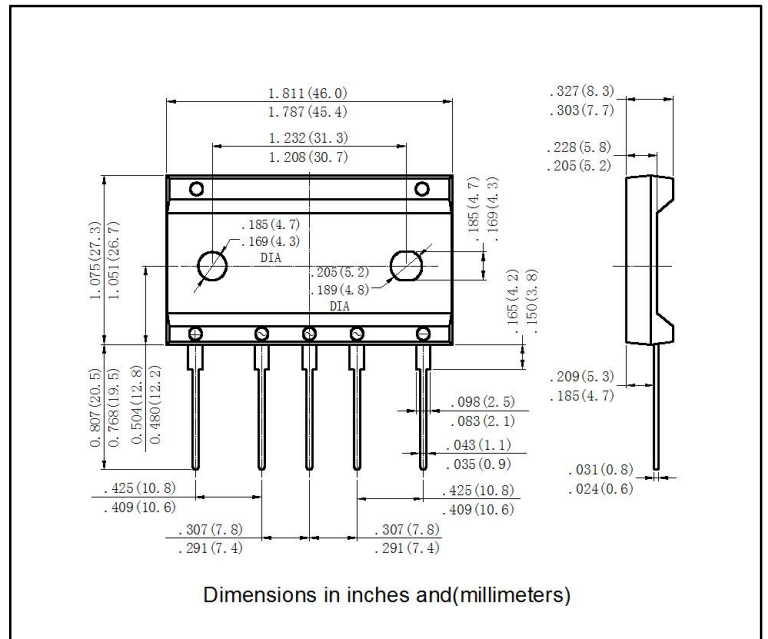
D45XT80 THRU D45XT160

产品特性描述 Features

- 环氧树脂封装材料符合美国 UL 实验室材料可燃性分类的 UL94: V-0 标准
Epoxy Resin material compliant with UL94: V-0, standards of UL Material Flammability Provisions
- 产品符合 RoHS 要求
Compliant with RoHS Provisions
- 低正向电压, 大正向电流通过能力
Low forward voltage, high forward current
- 高浪涌电流通过能力
High forward surge current capability
- 高导热性能 High heat-conducting performance
- 高温焊接性能: 260°C/10 秒
Thermal welding performance: 260°C/10sec

产品适用范围 Applications

- 开关电源 Switching Power Supply
- 家用电器, 办公设备 Home Appliances, Office Devices
- 工业自动化设备 Industrial Auto-equipments



最大额定值及电气特性 (除非特别标定条件, 否则环境温度 25°C, 单相半波 60Hz 阻性负载, 容性负载降额 20%)

Max. rated values & electric characteristics Conditions (Unless otherwise specified): Ambient

Temperature: 25°C, resistive loading with single phase 60Hz half-wave, 20% capacitive load derating. . .)

参数描述 Specifications		Symbol	D45XT80	D45XT100	D45XT120	D45XT160	Unit
最大反向击穿电压 Max. Reverse Breakdown Voltage		VRM	800	1000	1200	1600	V
贮存温度 Storage Temperature		Tstg	-55~150				°C
结温 Junction Temperature		T _J	150				°C
最大正向电压 Max. Forward Voltage	IF=22.5 A	V _F	1.10				V
在额定击穿电压下最大反向漏电流 Max.Reverse Leakage Current at rated Breakdown Voltage	T _A =25°C, VR=VRM	I _R	10				µA
	T _A =125°C, VR=VRM		500				
平均正向整流电流, 60Hz 正弦波阻抗 Forward Rectified Current, 60Hz sine wave resistance	T _c =100°C (with heatsink)	I _O	45.0				A
	T _a =26°C (without heatsink)		4.5				
最大正向浪涌电流, 8.3ms 脉冲宽度, 单脉冲正弦波, 额定负载 Max. Forward Surge Current, 8.3ms Pulse Width, Single Pulse Sine Wave, Rated load, T _J =25°C		I _{FSM}	450				A
绝缘耐压, 引线到管壳之间, 交流电持续一分钟 Dielectric Strength: Terminals to Case, AC 1 minute		V dis	2.5				KV
熔断特性 Rating for Fusing (1ms ≤ t < 8.3ms, T _J = 25°C)		I ² t	840				A ² s
规定条件下的热阻 Thermal Resistance	结和环境 Junction to ambient, without heatsink	R _{θJA}	16				°C/W
	结和外壳 Junction to case, with heatsink	R _{θJC}	0.8				°C/W
安装扭矩 Mounting torque		TOR	1.0 (推荐值 0.8) Recommended torque: 0.8				N.m

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Rating and Characteristic Curves (TA=25°C Unless otherwise noted)

图1 电流降额曲线

Fig.1: Current Derating Curve

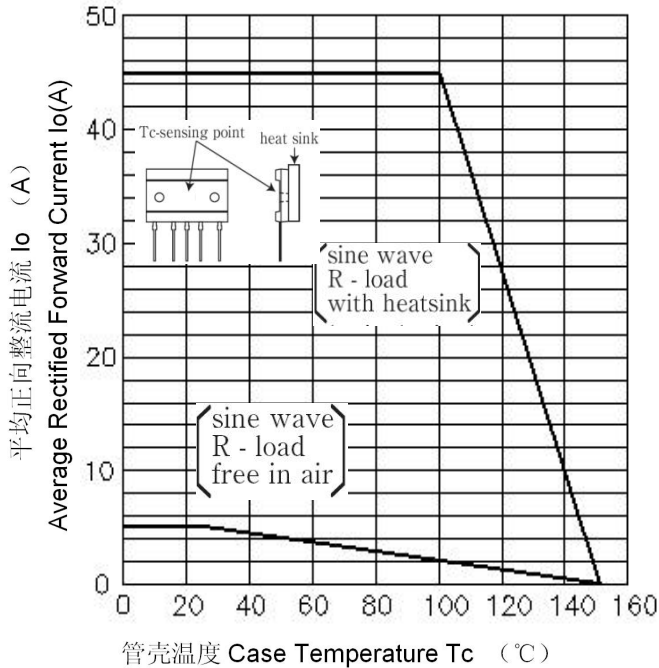


图2 标准反向特性曲线

Fig.2 Typical Reverse Characteristics

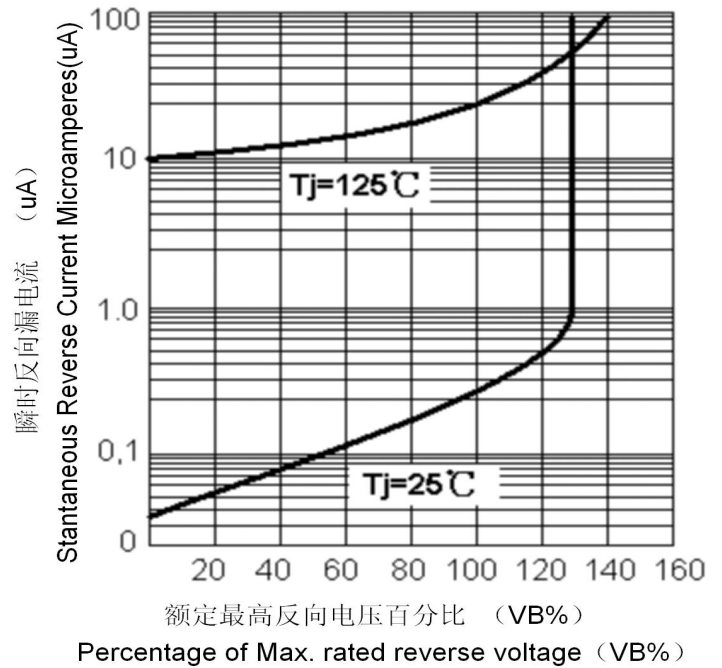


图3 最大浪涌电流曲线

Fig.3: Max. Surge Current

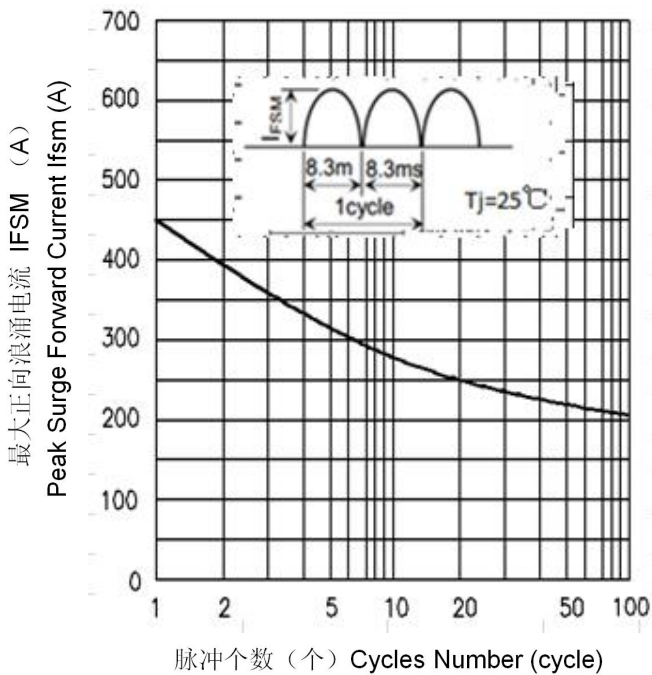
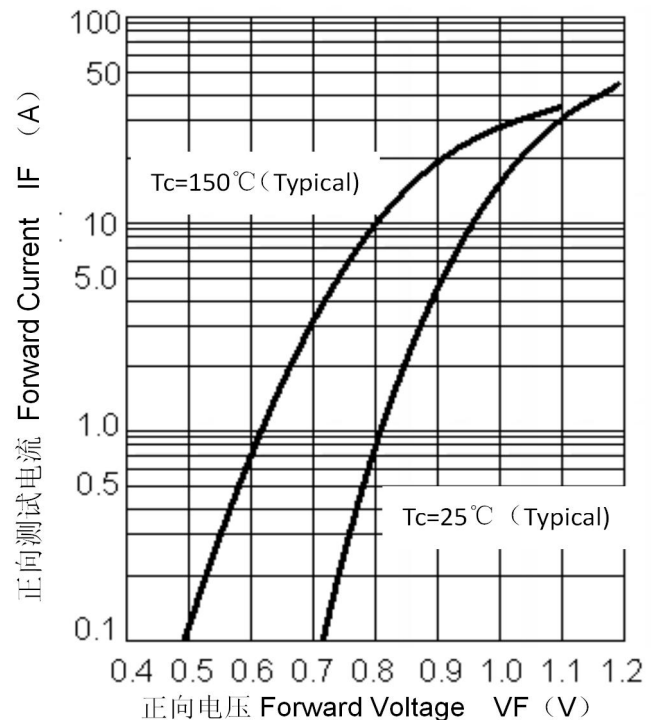


图4 额定正向特性曲线

Fig.4:Rated Forward Features



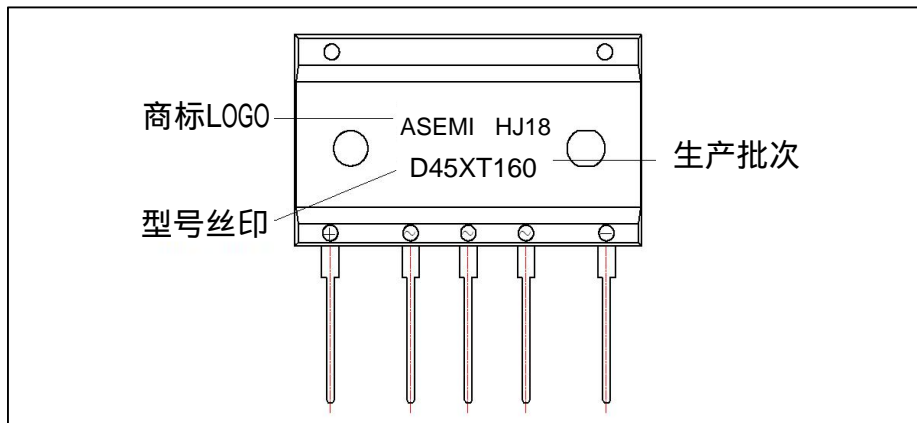
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■主要材料构成 Main Materials

编号 NO.	材料名称 Parts Name	成分构成 Material Composition
1	芯片 Chips	玻璃钝化硅整流二极管芯片 Glass Passivated Silicon Diode Chip
2	跳线 Jumper	铜 Copper
3	框架/引脚 Lead Frame	铜(表面电镀 6±2uM 厚度亮锡) Copper(Electro-plated bright tin thickness: 6±2uM)
4	外壳 Case	环氧树脂 Epoxy Resin UL94: V-0
5	焊锡膏 Solder	Pb:Sn:Ag=92.5%:5%:2.5%

■产品印字 Marking



备注：日期码由 4 位数字组成，如“HJ18”，表示 2018 年 10 月 18 日生产的产品。

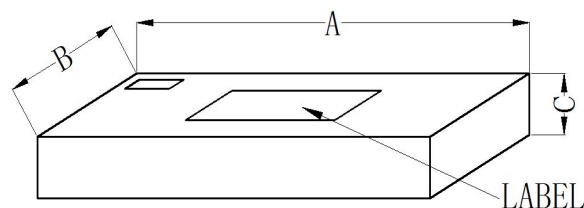
第一位数字“H”代表 2018 年。

第二位数字“J”代表 10 月份(1-12 月为字母 A/B/C/D/E/F/G/H/I/J/K/L)。

后 2 个数字“18”代表 18 日。

■包装规格 Packaging specification

1. 内盒规格 Inner box specifications



ITEM	A (mm)	B (mm)	C (mm)	QUANTITY (PCS)
INNER BOX	240	175	55	100

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2. 外箱规格 Outer carton specifications



ITEM	A (mm)	B (mm)	C (mm)	QUANTITY (PCS)
OUTER CARTON	255	365	300	1000

■ 储存环境及条件 Storage environment and conditions:

存放货物的仓库应满足如下要求：温度 3-35℃，湿度 45-75%RH。不要使产品遭受温度和湿度的快速变化。不要将产品存放在化学环境中，如硫酸气体或碱性气体中，否则会降低电极端子的焊接特性和使器件腐蚀。不要以散包装的形式存放产品。为了避免受潮气、灰尘等物质的影响，产品应保管于货架上。保持室内干燥，通风避免雨淋及阳光直射，防尘防潮，防火。请于本公司发货后 12 个月内使用本产品。如果储存时间超过 12 个月，请首先确认其焊接特性后再安装使用。

■ 安装注意事项 Installation notes:

1、桥堆的安装应充分考虑散热条件良好，安装在铝质散热板上：

Pay close attention to the heat dissipation condition, with AL heatsink

2、螺钉选用 Screw Selection:

- 平头十字螺钉 Cross type screw with flat head, M4*10~15mm
- Φ4 弹垫 Spring washer、Φ4 平垫 Flat washer

3、安装时应注意：

- 可直接使用自带垫圈 M4*10~15mm 十字螺钉 Spare washer M4*10~15mm, cross type screw are available.
- 可选用螺钉加平垫安装 Screw+flat washer are available.
- 如使用弹垫安装需在弹垫下面加平垫 When adopting spring washer, put a flat washer under the spring washer.

4、安装前应检查散热板表面有无毛刺、凹凸变形，确保管体与散热板贴合良好。

Make sure that the heatsink surface is smooth enough for perfectly mounting.

5、导热硅胶用量适当，涂覆均匀，涂覆厚度 0.10~0.20mm。

Use conductive silicone grease in moderation, average coating, thickness range:0.10~0.20mm.

6、导热硅脂推荐锥入度：400±15%（25℃，0.1mm）

Silicone grease recommended penetration: 400±15%（25℃，0.1mm）

7、必要时可对硅脂稍稍加热（40℃~50℃）降低粘度，以获得更薄的胶层厚度。

When necessary to grease slightly heating (40 to 50 °C) to obtain a lower viscosity, thinner layer thickness.

8、安装扭矩 Mounting Torque

- 建议桥堆安装静扭矩规格 Recommended static torque: 0.8 N.m
- 使用电动起子最大扭矩 Max torque for electric screw driver: ≤1.0N.m（10.0kg.cm）
- 电动起子转速建议 Recommended speed for electric-screw driver: ≤600r/min
- 禁用气动起子安装 Pneumatic screw driver is prohibited

9、桥堆引线允许有一次≤90°折弯，严禁出现≥180°回折和扭曲。

Lead wire bending(≤90°) is allowable for once, 180° bending is not allowed .