

### 特征 FEATURES

- .大电流承受能力.High current capability
- .高压利用能力.High voltage available
- .玻璃被钝化的压模结构.Glass passivated die construction
- .高浪涌承受能力.High surge current capability
- .45 A 工作在表面温度是 125°C,无热损耗的情况下.

45Ampere Operation At TL=125°C With No Thermal Runaway

### 机械数据 MECHANICAL DATA

.BD451N 代表阴性的

BD451-N N-Lead ,P-Case

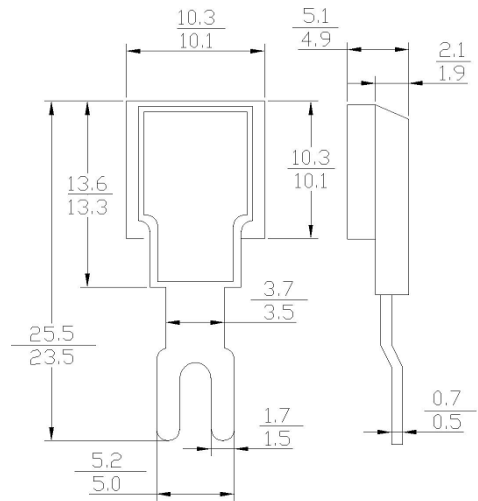


.BD451P 代表阳性的

BD451-P P-Lead ,N-Case



### BLOCK DIODE



Dimension in millimeters

**极限值和电参数** TA= 25°C除非另有规定. 单相,正半正弦波,60HZ,阻抗或电感负载.为电容装载,减少电流的 20%

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C Ambient temp. Unless otherwise specified.Single phase, half sine wave, 60HZ,resistive or inductive load.  
For capacitive load, derate current by 20%

	SYMBOL	BD451N	BD451P	UNITS
最大峰值反向电压 Maximum Current Peak Reverse Voltage	VRRM	100	100	Volts
最大反向有效电压 Maximum RMS Voltage	VRMS	70	70	Volts
最大直流阻断电压 Maximum DC Blocking Voltage	VDC	100	100	Volts
最大正向平均整流电流 TL=100°C Maximum Average Forward Rectified Current	I(AV)	45		Amps
正向峰值浪涌电流 Peak Forward Surge Current 8.3ms Single Sine-wave on Rated Load (JEDEC Method)	IFSM	450		Amps
45A 直流电时最大正向瞬间电压降 Maximum Instantaneous Forward Voltage Drop at 45A DC	VF	1.1		Volts
最大反向漏电流 Maximum DC Reverse Current TA=25°C at Rated DC Blocking Voltage TA=100°C	IR	5 500		uA
典型热阻抗 Typical thermal resistance	RθJA	1.0		°C/W
工作温度存储温度 Operating AND Storage Temperature Range	TSTG/ TJ	-55 to +150		°C

# RATING AND CHARACTERISTIC CURVES BD451N THRU BD451P

FIG. 1 – 最大正向平均电流降额  
FIG. 1 – MAXIMUM AVERAGE FORWARD CURRENT DERATING

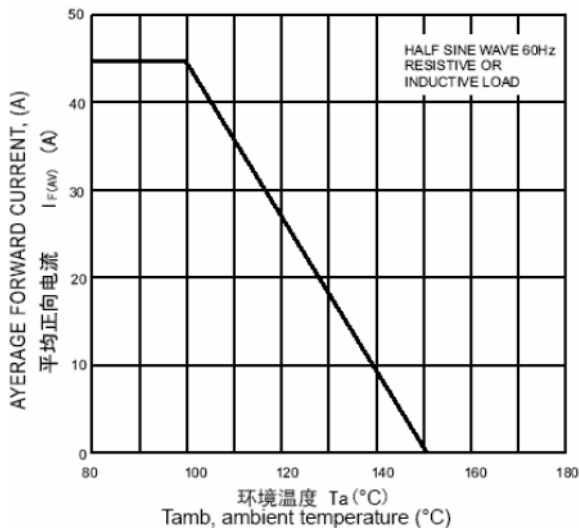


FIG. 2 – 最大非重复正向浪涌电流  
FIG. 2 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

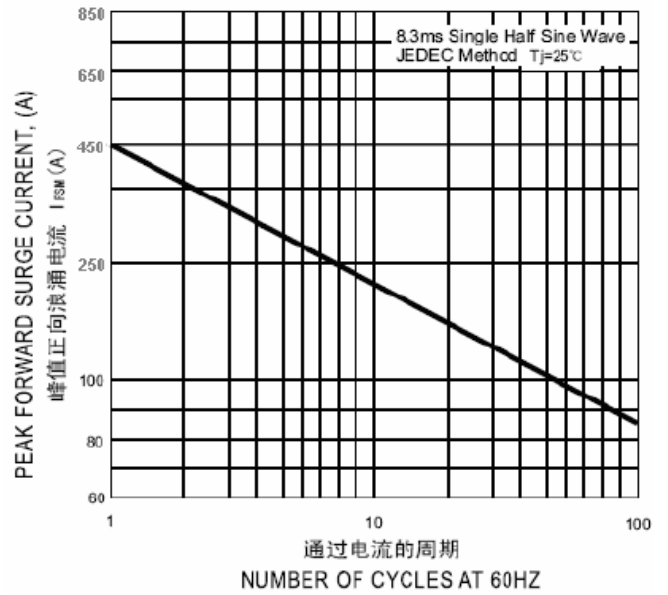


FIG. 3 – 反向特性曲线(典型)  
FIG. 3 – TYPICAL REVERSE CHARACTERISTICS

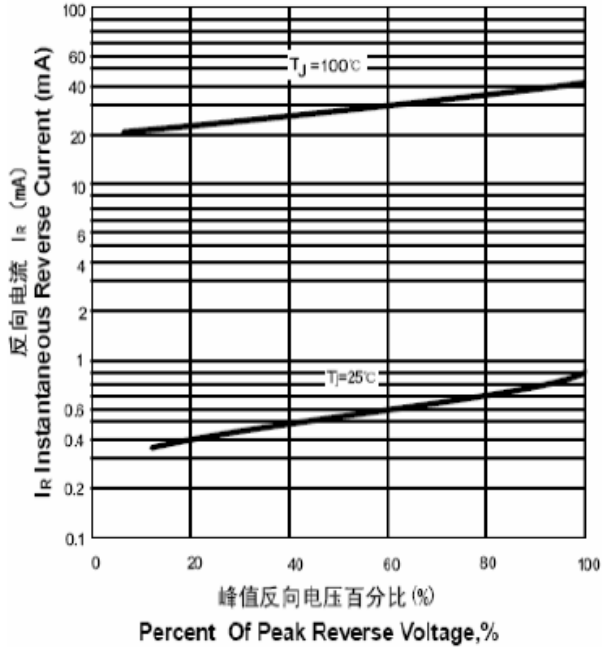


FIG. 4 – 正向特性曲线(典型)  
FIG. 4 – TYPICAL FORWARD CHARACTERISTICS

