

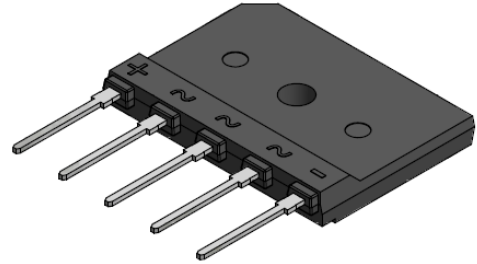
3PB2512 Thru 3PB2516

High Current Glass Passivated Molding Three -Phase Bridge Rectifier

Reverse Voltage 1200 to 1600V Forward Current 25A

FEATURES

- Superior thermal conductivity
- High current capacity with small package
- Glass passivated chip junctions
- Superior thermal conductivity
- High IFSM
- Plastic Package material has Underwriters Laboratory Flammability Classification 94V-0



Maximum Ratings & Electrical Characteristics (TA = 25°C unless otherwise specified.)

Parameters	Symbol	3PB2512	3PB2514	3PB2516	Unit
Maximum repetitive voltage	V _{RM}	1200	1400	1600	V
Maximum RMS Voltage	V _{RMS}	840	980	1120	V
Maximum DC Blocking Voltage	V _{DC}	1200	1400	1600	V
Peak Reverse Current (per leg) @T _j = 25°C	I _R	10			μA
At Rated DC Blocking Voltage @T _j = 125°C		5			mA
Average rectified forward current 60Hz sine wave, R-load with heatsink T _j ≤ 150°C	I _o	25			A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	350			A
I ² t Rating for Fusing	I ² t	508			A ² sec
RMS Isolation Voltage from Case to Lead	V _{ISOL}	2500			V
Max instantaneous forward voltage @12.5A/25°C	V _F	1.1			V
Typical Thermal Resistance without heatsink(1)	R _{θJA}	5			°C/W
Typical Thermal Resistance with heatsink(2)	R _{θJC}	0.6			°C/W
Max operating junction temperature	T _J	-55~150			°C
Storage temperature	T _{STG}	-55~150			°C
Max Mounting torque	T _{or}	0.8			N • m

Note

- (1) Unit mounted on P.C.B without heatsink
- (2) Unit case mounted on aluminum 110x60x25mm plate heatsink

3PB2512 Thru 3PB2516

Electrical Characteristic Curves (TA = 25°C unless otherwise specified.)

Fig. 1 Forward Current Derating Curve

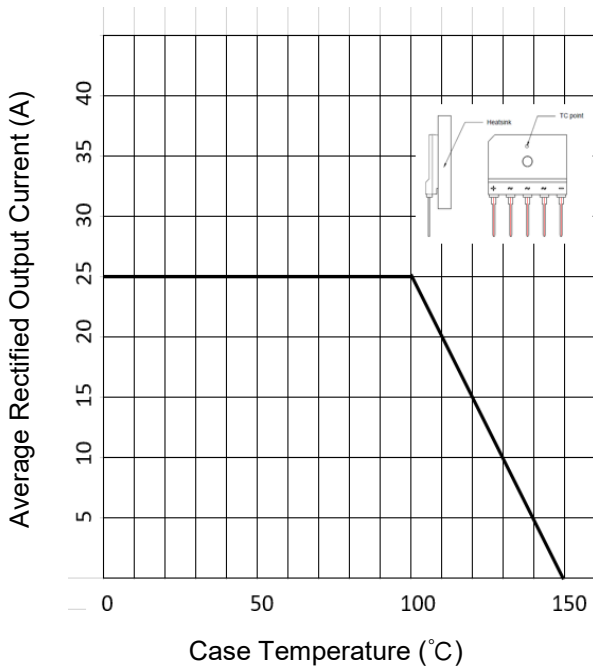


Fig.2 Typical Reverse Characteristics

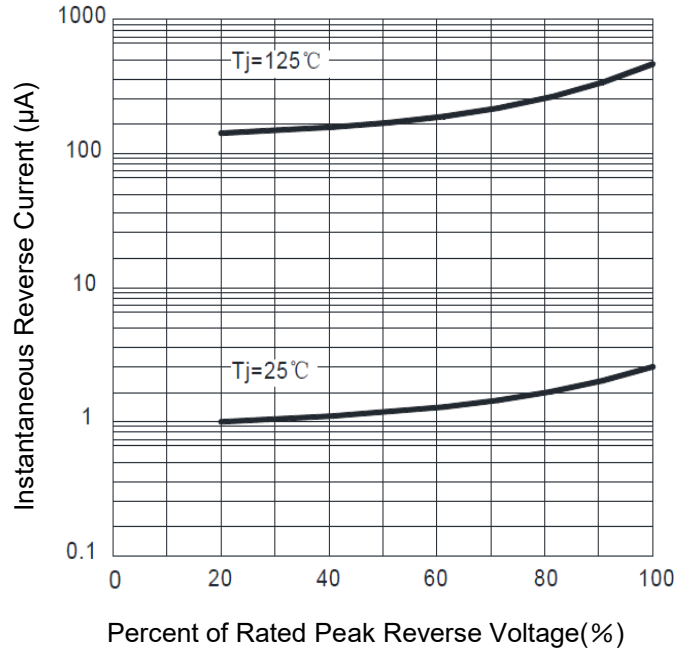


Fig. 3 Forward Voltage

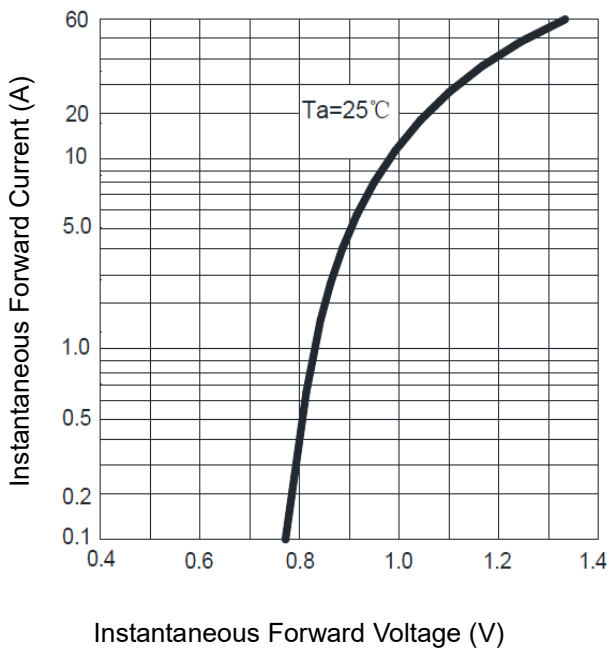
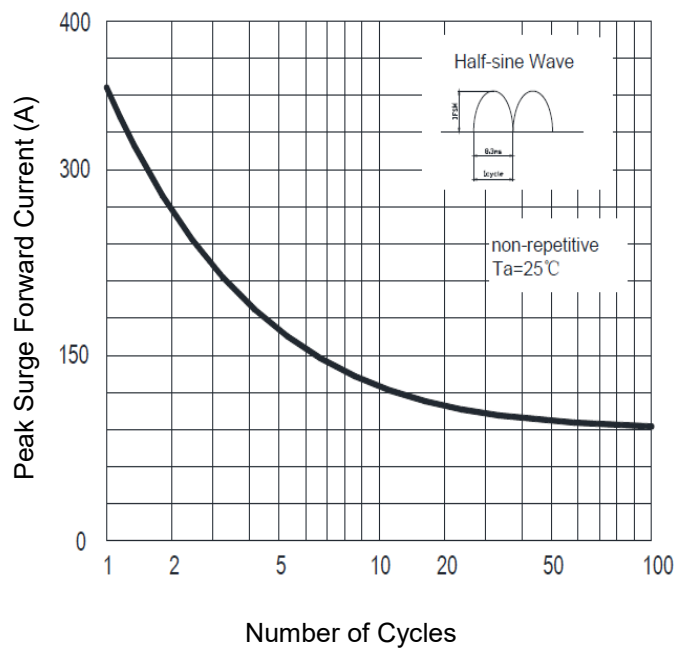
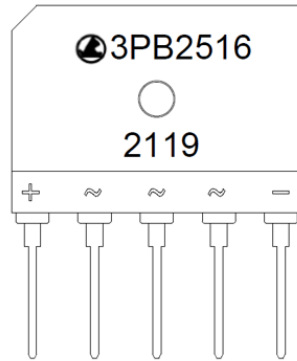


Fig. 4 Peak Surge Forward Capability



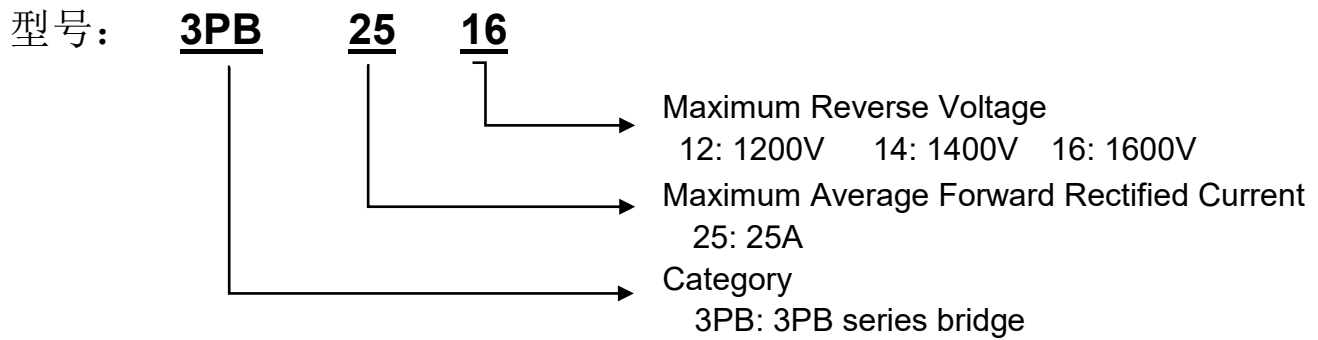
3PB2512 Thru 3PB2516

Marking Identification

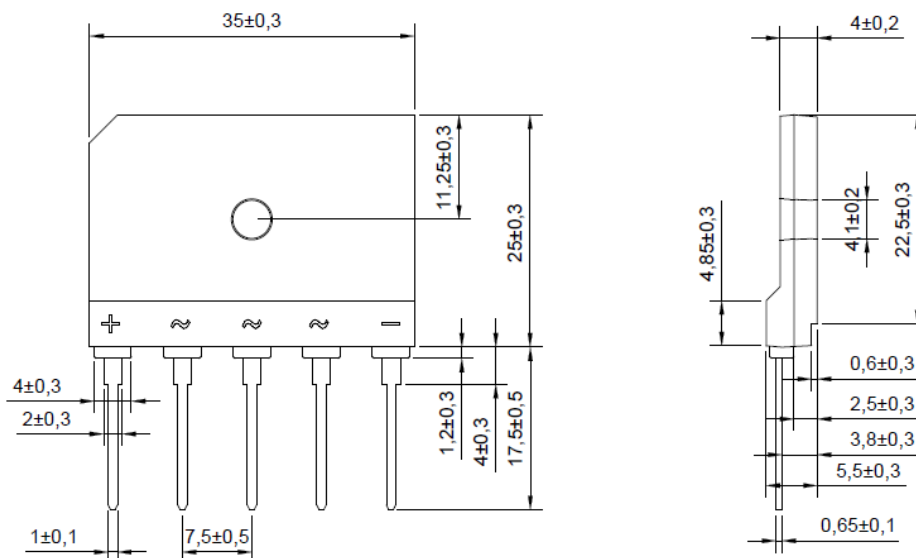


Note:

生产日期码包含4位数字，例如“2119”，前两个数字“21”表示为2021年，另外二个数字“19”是指第19周，即表示该产品为2021年19周生产。



Package Dimensions



3PB2512 Thru 3PB2516

Update Record

版次	更新记录	更新作者	更新日期
1	第一版	伍泽雄	2021-5-10
2	增加 Tstg 温度下限值	陈帅	2021-8-18
3	增加 Tj 温度下限值	陈帅	2023-11-01
4	Io 由 50A 更正为 25A	陈帅	2024-04-07

DISCLAIMER

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.
- Before you use our Products for new Project, you are requested to carefully read this document and fully understand its contents. LRC shall not be in any way responsible or liable for failure, malfunction or accident arising from the use of any LRC's Products against warning, caution or note contained in this document.
- All information contained in this document is current as of the issuing date and subject to change without any prior notice. Before purchasing or using LRC's Products, please confirm the latest information with a LRC sales representative.