ShinDengen

AMP01HD10

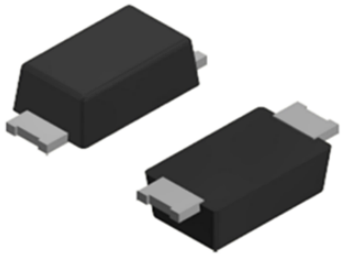
Schottky Barrier Diodes
100V, 1A

Feature

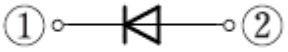
- Low I_R
- High Recovery Speed
- RoHS:Yes
- Based on AEC-Q101

OUTLINE

Package (House Name): SOD-123FL



Equivalent circuit



Absolute Maximum Ratings

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	°C
Junction temperature	Tj		-55 to 150	°C
Repetitive peak reverse voltage	V_{RRM}		100	V
Average forward current	I_F(AV)	Tl=122°C	1	A
Average forward current	I_F(AV)		1.57	A
Surge forward current	I_{FSM}	50Hz half sine wave, 1 cycle, Non-repetitive	20	A

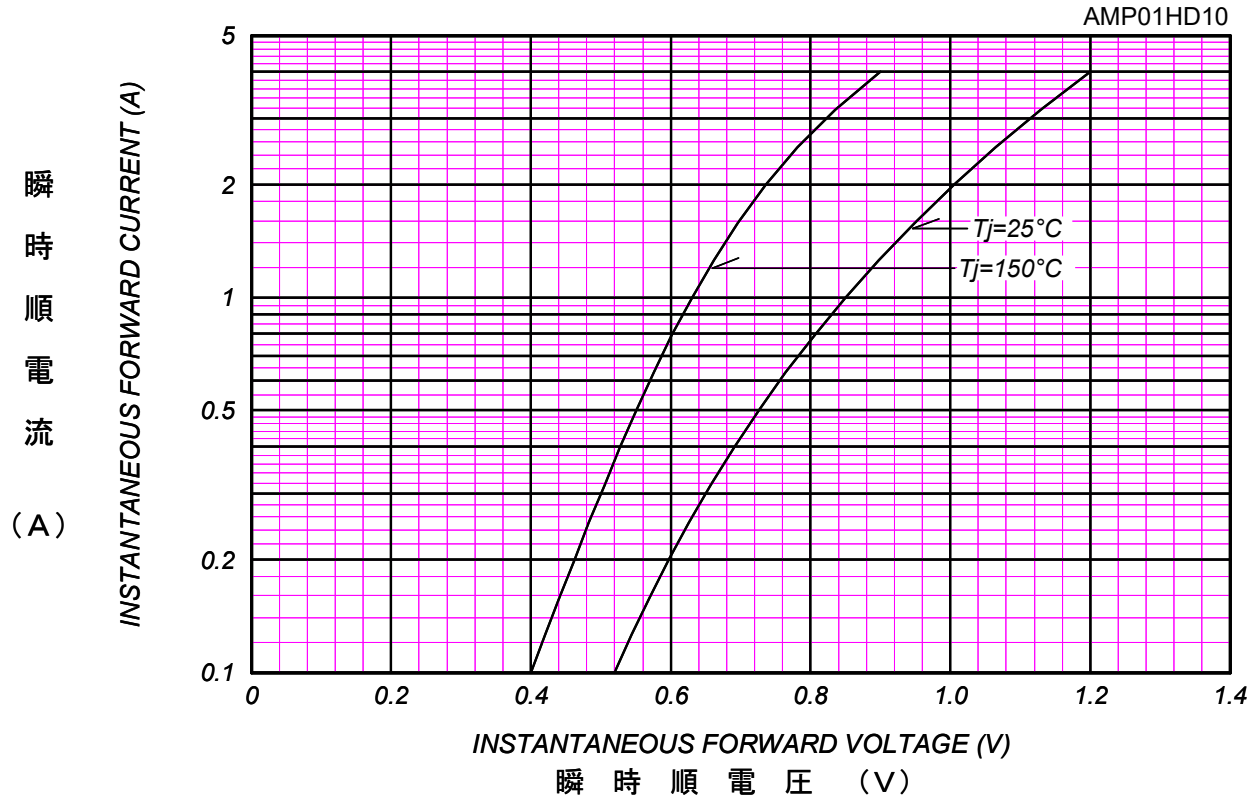
※ ：See the original Specifications

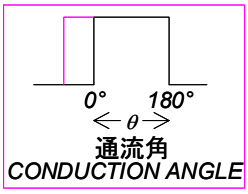
Electrical Characteristics

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=1A, Tj=25°C	-	-	0.85	V
Reverse current	I_R	VR=VRRM, Tj=25°C	-	-	0.05	mA
Thermal resistance	Rth(j-l)	Junction to lead	-	-	25	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient (P.C.Board mounted)	-	-	300	°C/W

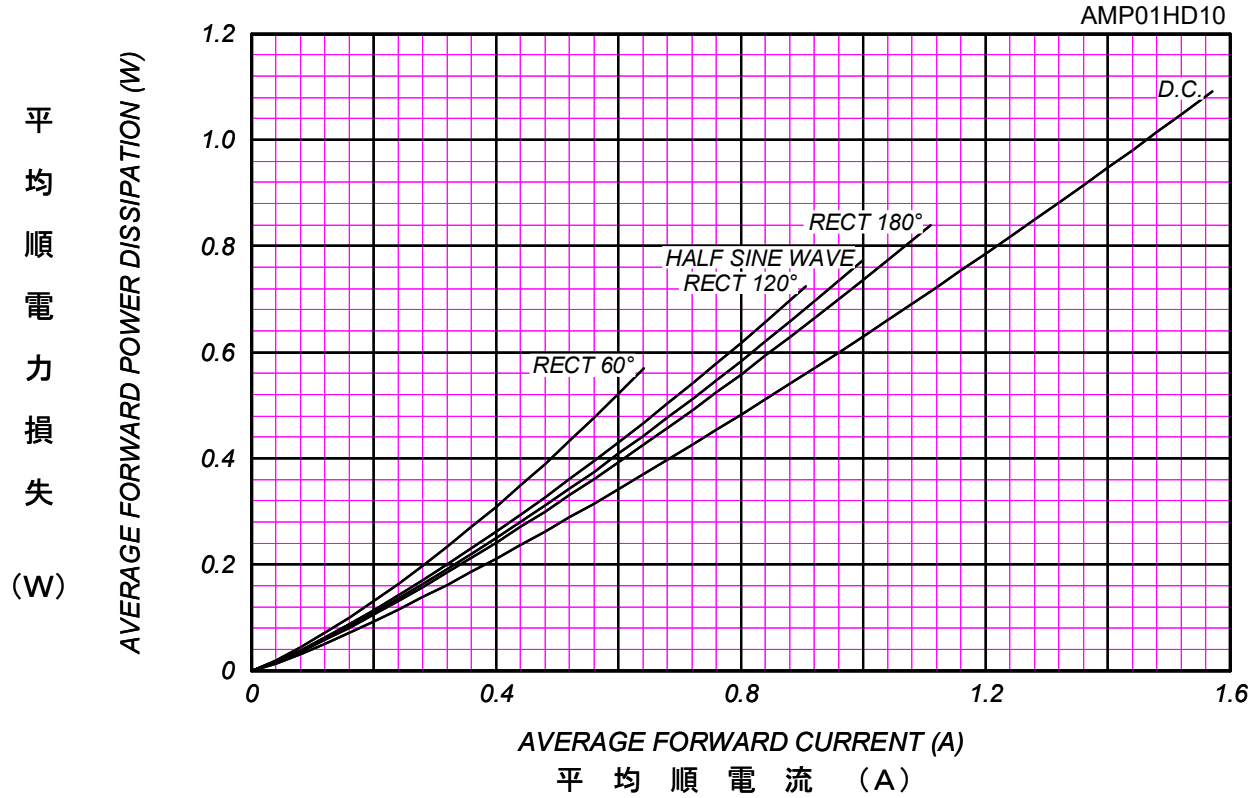
※ ：See the original Specifications

順　電　圧　特　性
FORWARD CURRENT VS. VOLTAGE



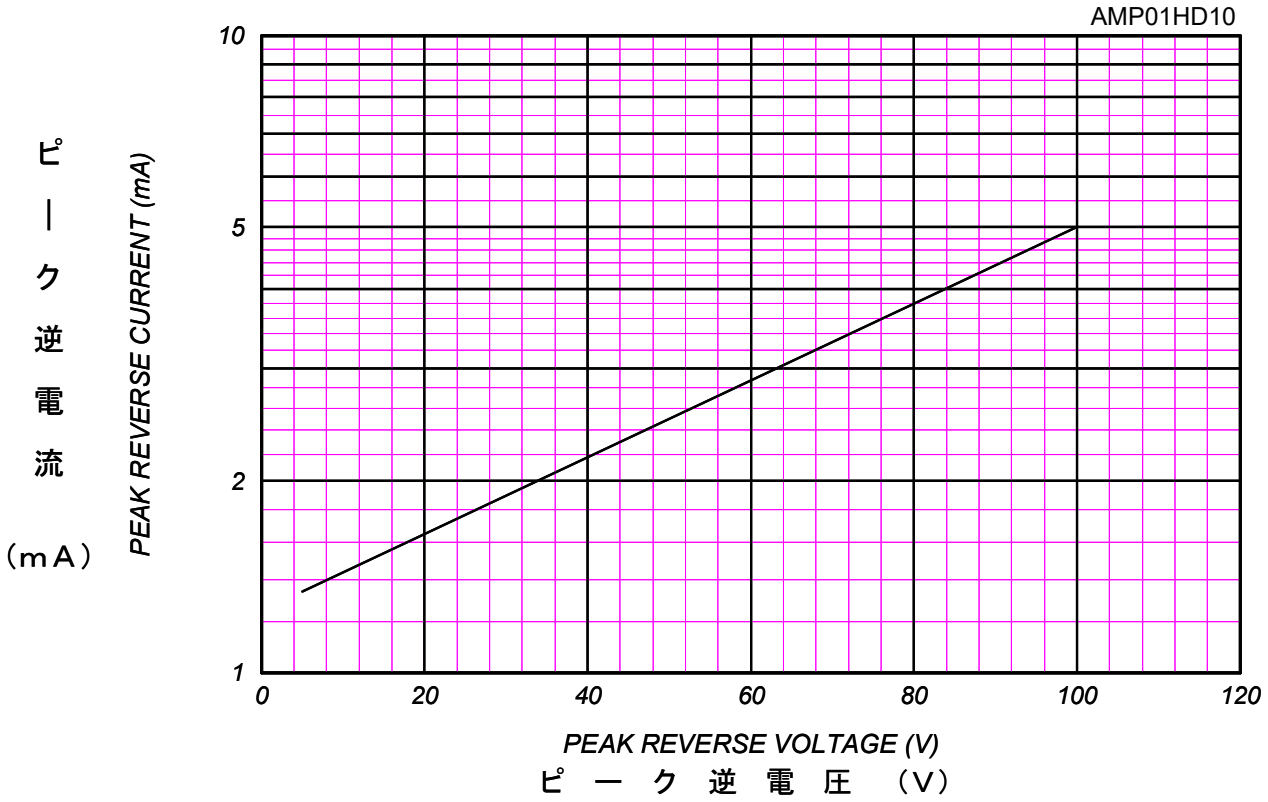


平　均　順　電　力　損　失　特　性
AVERAGE FORWARD POWER DISSIPATION

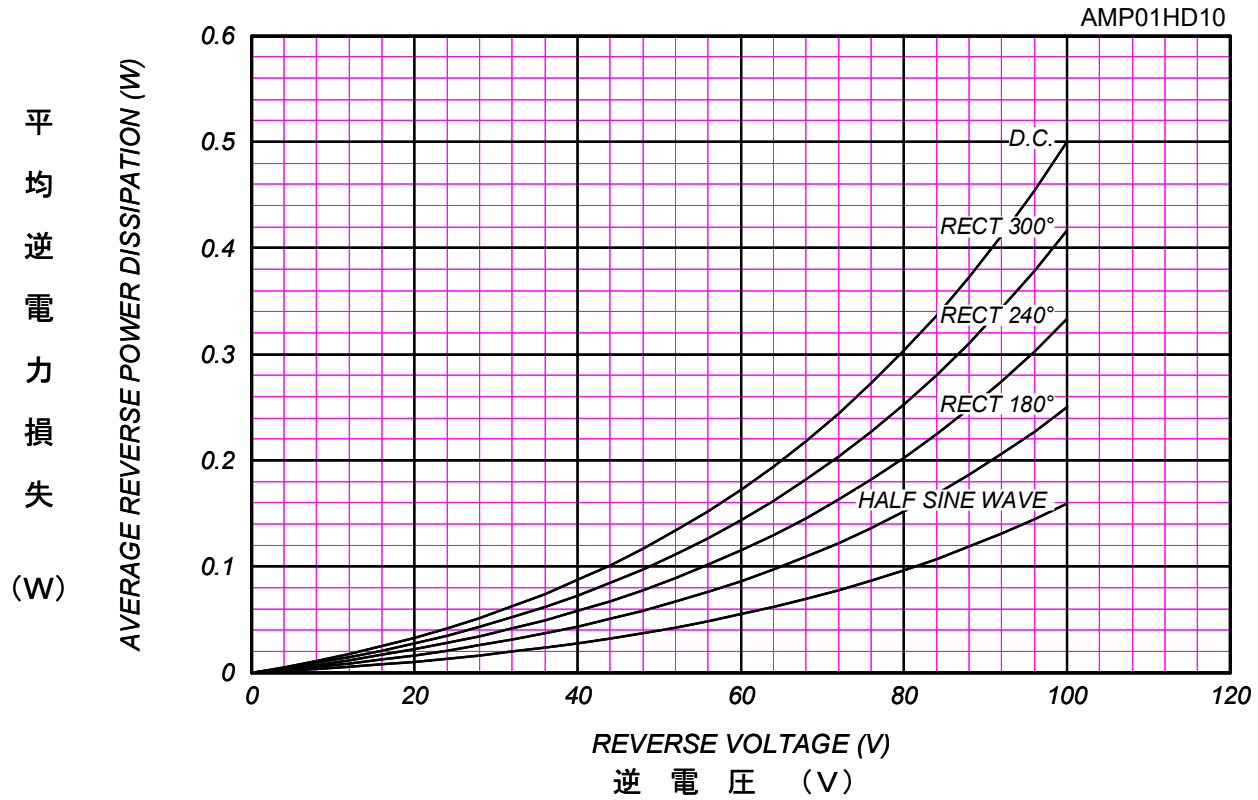


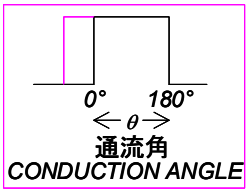
ピーク逆電流　－　ピーク逆電圧特性
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

Tj= 150 °C



平均逆電力損失
AVERAGE REVERSE POWER DISSIPATION

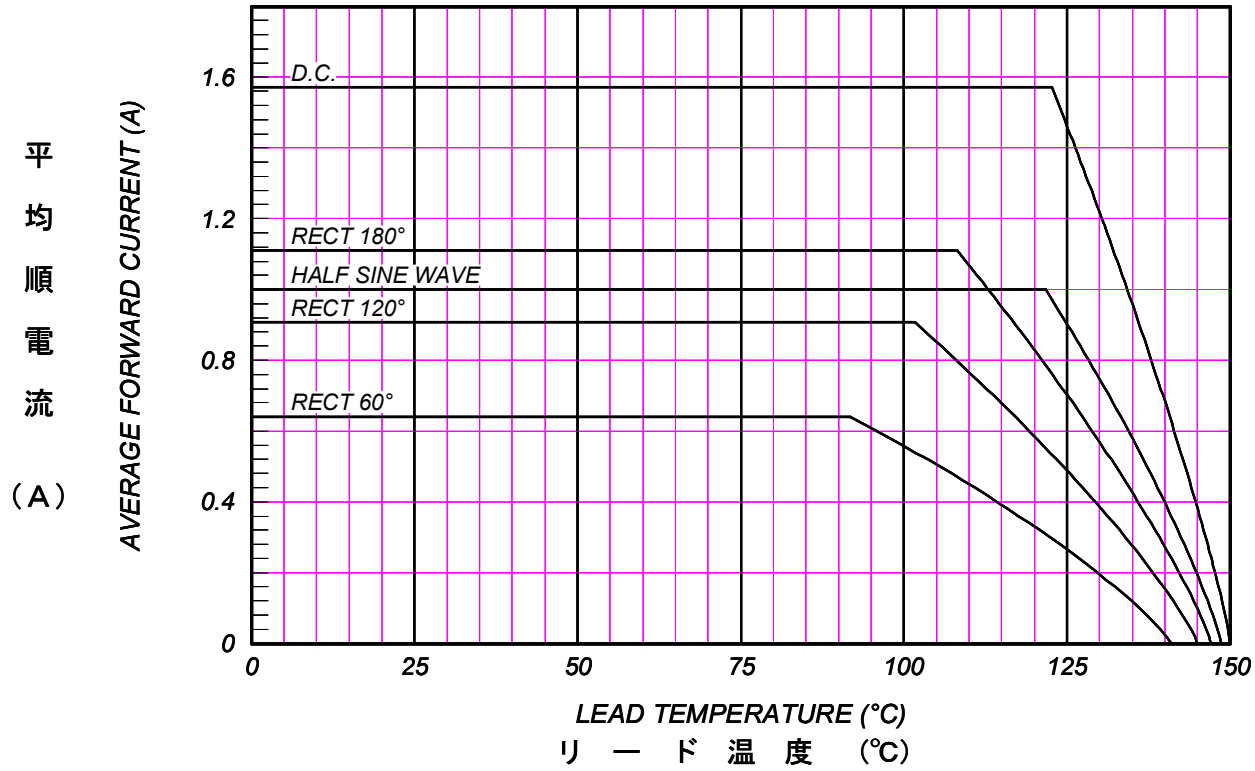


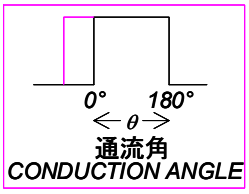


平 均 順 電 流 ー リ ー ド 温 度 定 格
AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE

V_{RM}=50V

AMP01HD10

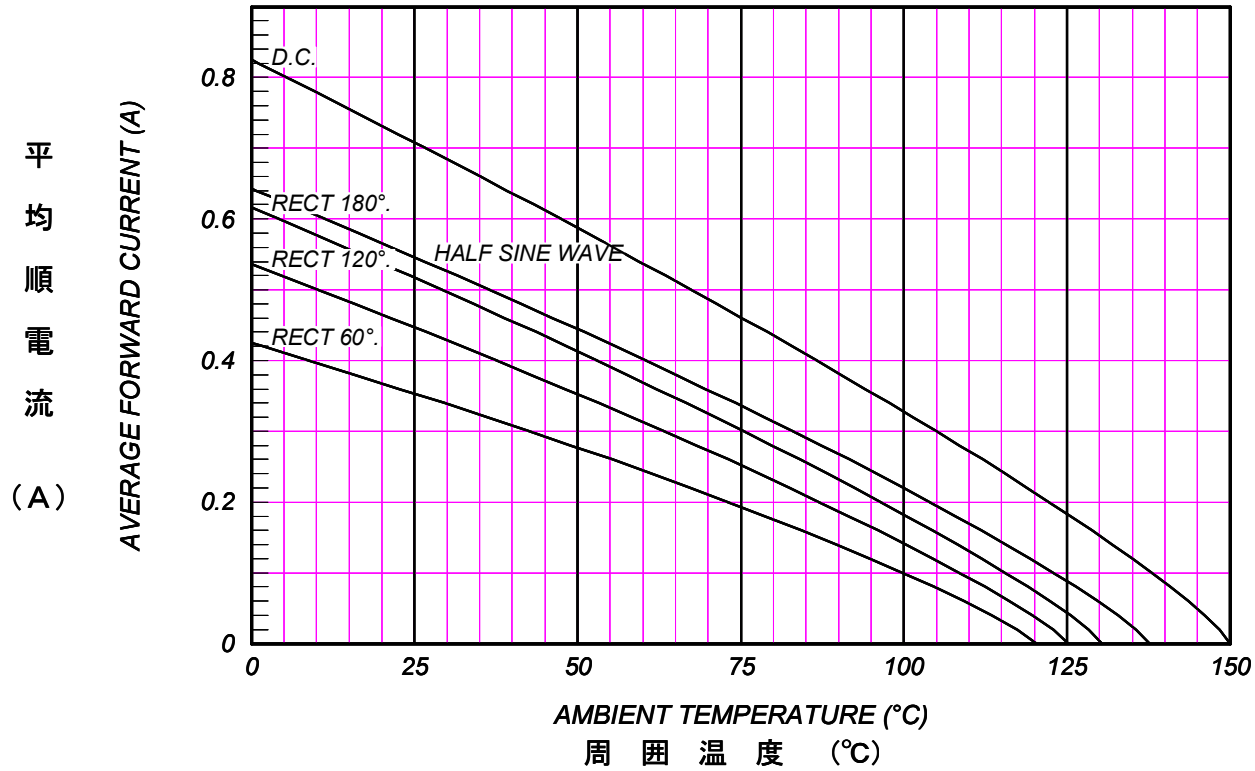




平 均 順 電 流 ー 周 囲 温 度 定 格
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

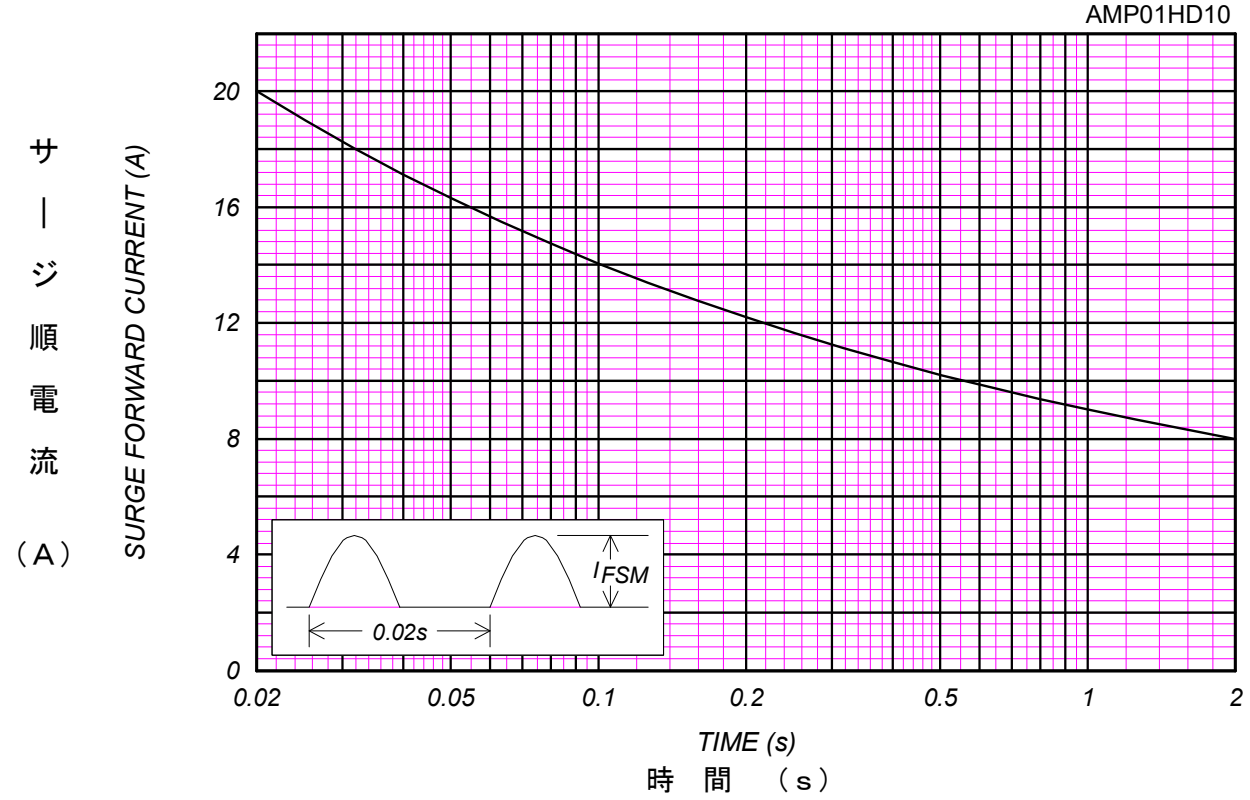
Glass-Epoxy Substrate Mounted(Soldering Land=1.22×0.91mm,Both side),V_{RM}=50V

AMP01HD10



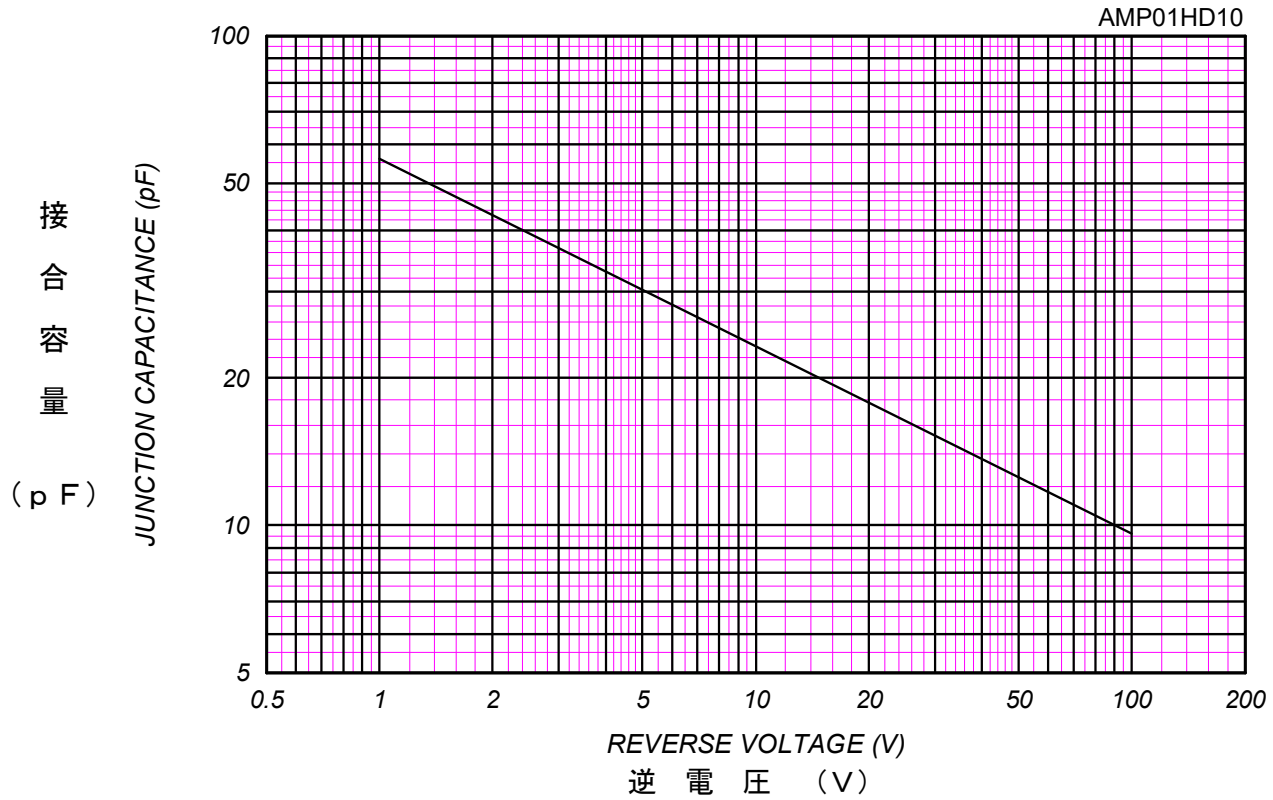
サ ー ジ 順 電 流 定 格
SURGE CURRENT RATINGS

f=50Hz,Half Sine Wave,Non-Repetitive,No Load



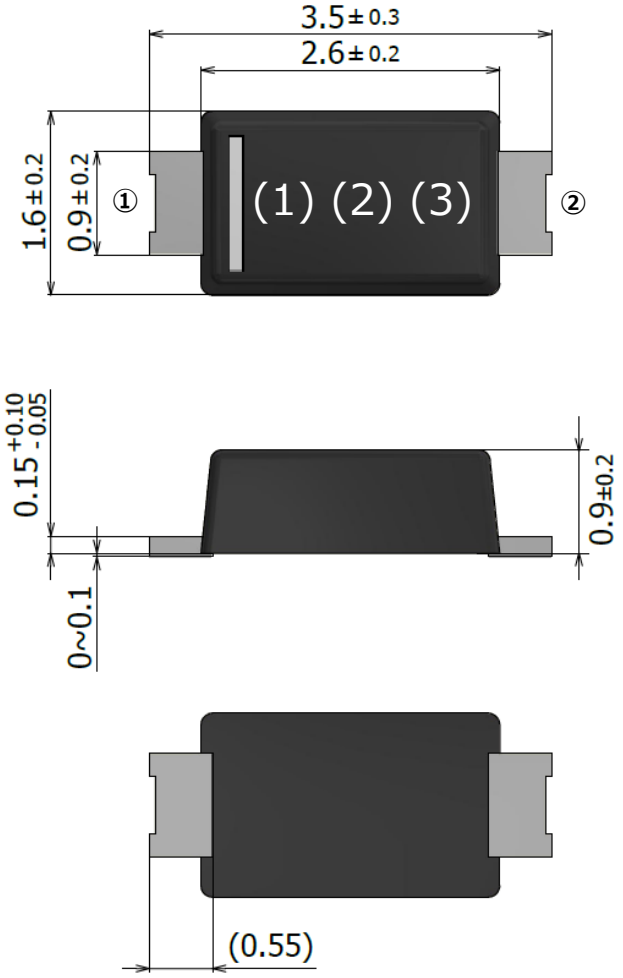
接 合 容 量 特 性
JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

Tj=25°C,Vm=20mV_{RMS},f=100kHz,Typical Value



SOD-123_FL

■外形図 Package Outline



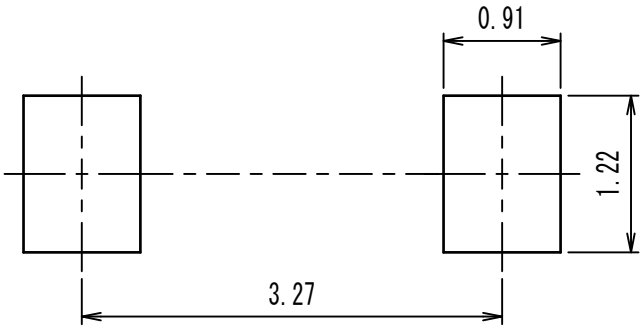
マーク記載内容 Marking
(1) 製品名 Type
AMP01HD10 : D

(2) 生産年 Production year

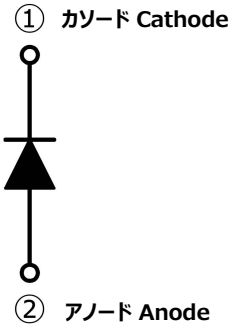
(3) 生産月 Production month

製品重量： 0.012g
Weight

■推奨ランドサイズ Mounting Pad Layout



■内部回路図 Inner Circuit



Notes

1. If you wish to use any such product, please be sure to refer to the specifications issued by Shindengen.

2. All products described or contained herein are designed with a quality level intended for use in standard applications requiring an ordinary level of reliability. If these products are to be used in equipment or devices for special or specific applications requiring an extremely high grade of quality or reliability in which failures or malfunctions of products may directly affect human life or health, a local Shindengen office must be contacted in advance to confirm that the intended use of the product is appropriate. Shindengen products are grouped into the following three applications according the quality grade.

   【Standard applications】
   Computers, office automation and other office equipment, communication terminals, test and measurement equipment, audio/visual equipment, amusement equipment, consumer electronics, machine tools, personal electronic equipment, industrial equipment, etc.
   【Special applications】
   Transportation equipment (vehicles, ships, etc.), trunk-line communication equipment, traffic signal control systems, anti-disaster/crime systems, safety equipment, medical equipment, etc.
   【Specific applications】
   Nuclear reactor control systems, aircraft, aerospace equipment, submarine repeaters, life support equipment and systems, etc.

3. Although Shindengen continuously endeavors to enhance the quality and reliability of its products, customers are advised to consider and take safety measures in their design, such as redundancy, fire containment and anti-failure, so that personal injury, fires, or societal damages can be prevented.

4. Please note that all information described or contained herein is subject to change without notice due to product upgrades and other reasons. When buying Shindengen products, please contact the Company’s offices or distributors to obtain the latest information.

5. Shindengen shall not bear any responsibility with regards to damages or infringement of any third-party patent rights and other intellectual property rights incurred due to the use of information on this website.

6. The information and materials on this website neither warrant the use of Shindengen's or any third party’s patent rights and other intellectual property rights, nor grant license to such rights.

7. In the event that any product described or contained herein falls under the category of strategic products controlled under the Foreign Exchange and Foreign Trade Control Law of Japan, exporting of such products shall require an export license from the Japanese government in accordance with the above law.

8. No reprinting or reproduction of the materials on this website, either in whole or in part, is permitted without proper authorization from Shindengen.