# BYS10-45HE3_A/H
## SCHOTTKY RECTIFIER DIODES

## Features

- Average Forward Current:$I_{F(AV)}$=3A
- Polarity: Color band denotes cathode




**SMA**
**(DO-214AC)**



## Package Marking and Ordering Information

| Product ID | Pack | Marking | Qty(PCS) |
|---|---|---|---|
| BYS10-45HE3_A/H | SMA (DO-214AC) | SS34 | 2000 |

## Maximum Ratings (Ta=25°C unless otherwise noted)

| Item | Symbol | Unit | Test Conditions | Limit |
|---|---|---|---|---|
| Repetitive Peak Reverse Voltage | $V_{RRM}$ | V | | 40 |
| Maximum RMS Voltage | $V_{RMS}$ | V | | 28 |
| Average Forward Current | $I_{F(AV)}$ | A | 60Hz Half-sine wave Resistance load, FIG.1 | 3.0 |
| Surge(Non-repetitive)Forward Current | $I_{FSM}$ | A | 60Hz Half-sine wave, 1 cycle, Ta=25℃ | 70 |
| Junction Temperature | $T_J$ | ℃ | | -55~+125 |
| Storage Temperature | $T_{STG}$ | ℃ | | -55 ~ +150 |

## Electrical Characteristics (Ta=25°C unless otherwise specified)

| Item | Symbol | Unit | Test Condition | | Limit |
|---|---|---|---|---|---|
| Peak Forward Voltage | $V_F$ | V | $I_F$=3.0A | | 0.55 |
| Peak Reverse Current | $I_{RRM1}$ | mA | $V_{RM}=V_{RRM}$ | Ta=25℃ | 0.5 |
| | $I_{RRM2}$ | | | Ta=100℃ | 10 |
| Thermal Resistance(Typical) | $R_{\theta J-A}$ | °C/W | Between junction and ambient | | 75 |
| | $R_{\theta J-L}$ | | Between junction and terminal | | 17 |

**Notes:**

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

## Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

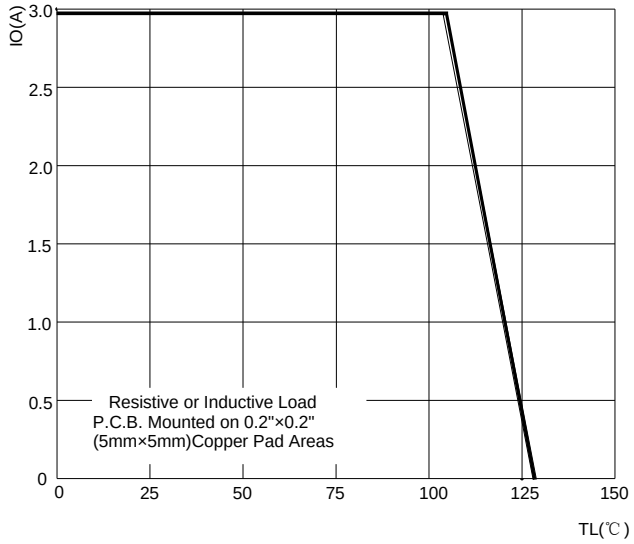



FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

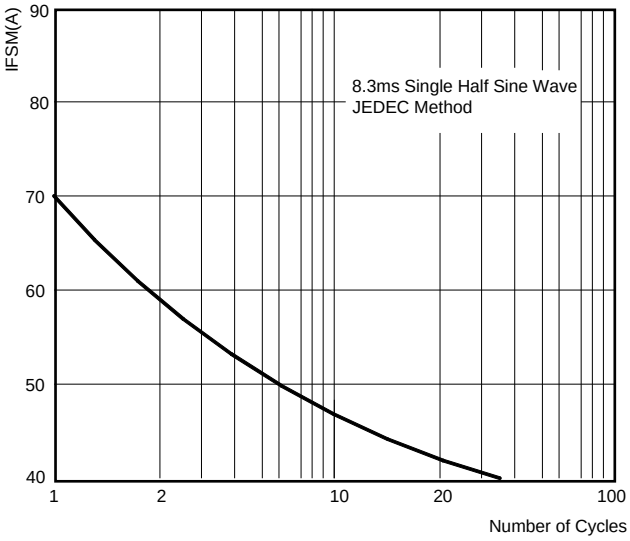



FIG.3: TYPICAL FORWARD CHARACTERISTICS

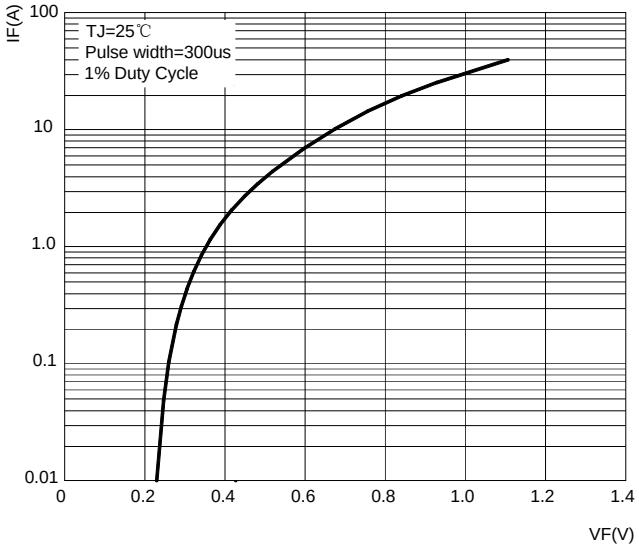
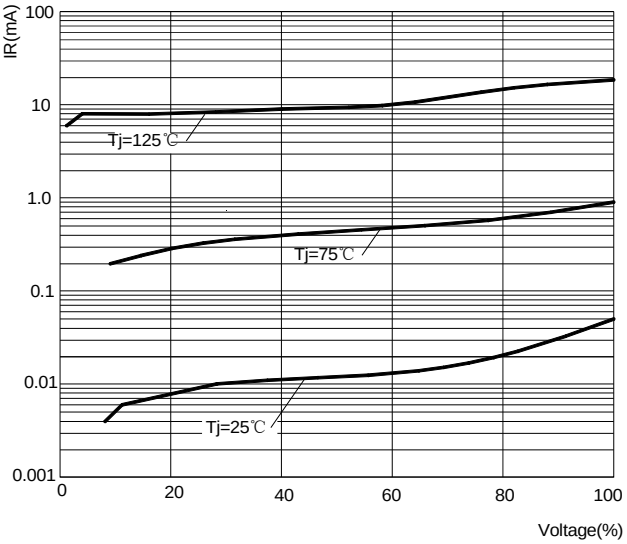
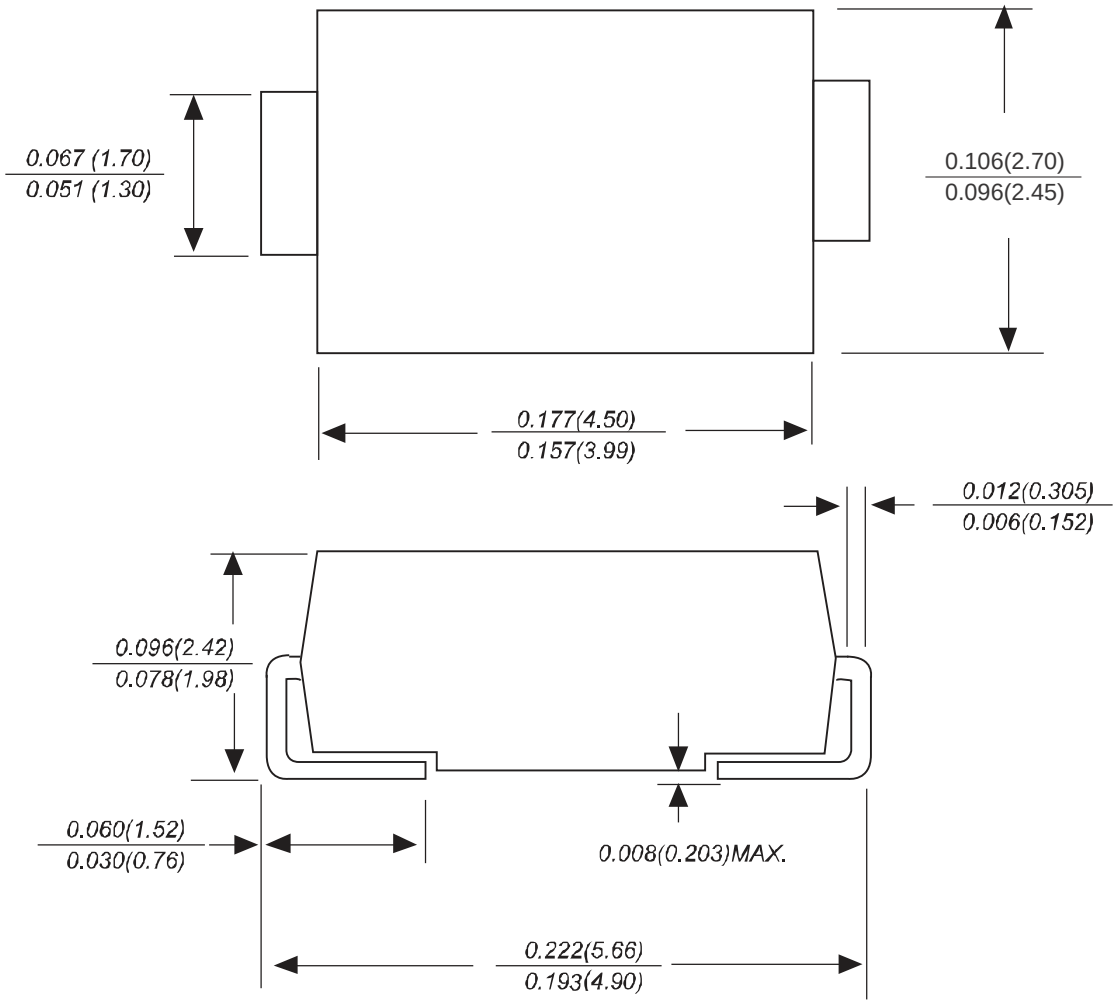



FIG.4：TYPICAL REVERSE CHARACTERISTICS



## Package Outline Dimensions

### SMA(DO-214AC)




*Dimensions in inches and (millimeters)*

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## HXY MOSFET:

BV05C-H HESD36VD3B HSD15C.TCT HSEN2411D3 RLSD32A121V 60N06 HESDSLC3V3D3B HSG3D15B3.3MA PESDSC2FD5VU HPTVSUC3D5VB PJSD24CW_R1 HSTS521050B331 HLY323BC1524L AZ4836-01L HACPDQC5V0-HF HAZ4007-01H HRCLAMP3371ZCTFT TPSMB28A-VR ESD5L5.0C-HXY ESD5LM5.0C-HXY HCEZ36V,L3F HSEN3611D3 LM393DR-HXY PESDNC2XD5VBF PESDNC2XD5VBL PJEC5V0M1FN2 AZ4007-01H TPSMB100CA-VR AQ15C-01FTG PESDLC2FD3V3BH