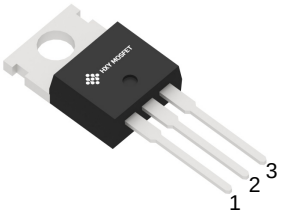
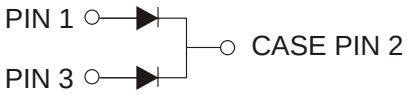
# VS30CTQ080-M3

Schottky Rectifier Diodes




**TO-220C(TO-220AB-3)**




## Features

- High frequency operation
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

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

| Parameter | Symbol | Unit | Limit |
|---|---|---|---|
| Repetitive Peak Reverse Voltage | $V_{RRM}$ | V | 100 |
| Average Rectified Output Current @60Hz sine wave, R-load, $T_a$=25°C | $I_O$ | A | 30 |
| Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, $T_a$=25°C | $I_{FSM}$ | A | 250 |
| Current Squared Time @1ms≤t<8.3ms Tj=25°C | $I^2t$ | $A^2s$ | 176 |
| Storage Temperature | $T_{stg}$ | °C | -55 ~ +175 |
| Junction Temperature | $T_j$ | °C | -55 ~ +175 |

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

| Parameter | Symbol | Unit | Test Conditions | Limit |
|---|---|---|---|---|
| Maximum instantaneous forward voltage drop per diode | $V_{FM}$ | V | $I_{FM}$=15.0A | 0.8 |
| Maximum DC reverse current at rated DC blocking voltage per diode | $I_{RRM1}$ | mA | $V_{RM}$=$V_{RRM}$ $T_a$=25℃ | 0.1 |
| | $I_{RRM2}$ | | $V_{RM}$=$V_{RRM}$ $T_a$=125℃ | 20 |

## Typical Characteristics

FIG1:Io -Tc Curve

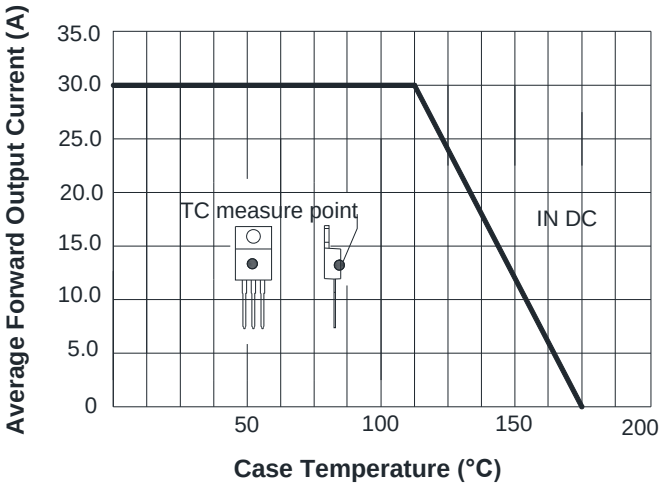



FIG2:Surge Forward Current Capability

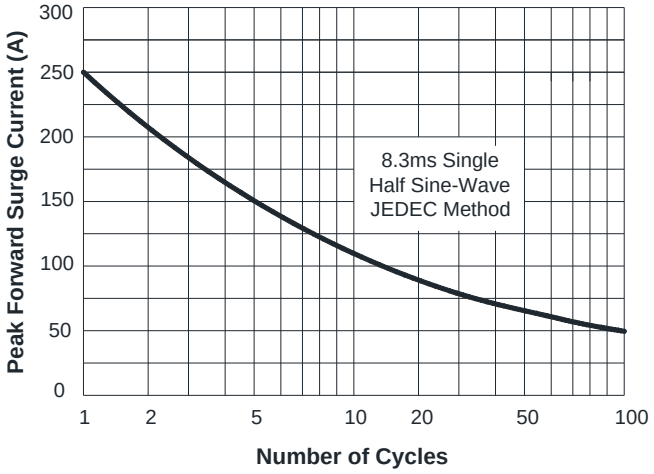



FIG3: Forward Voltage

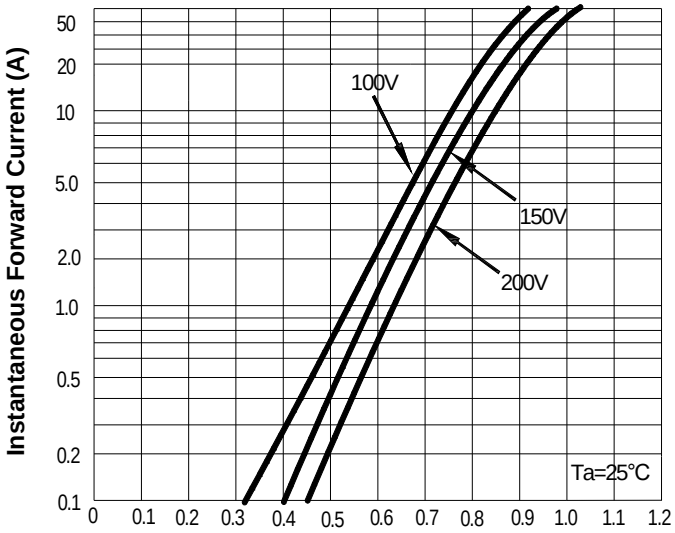
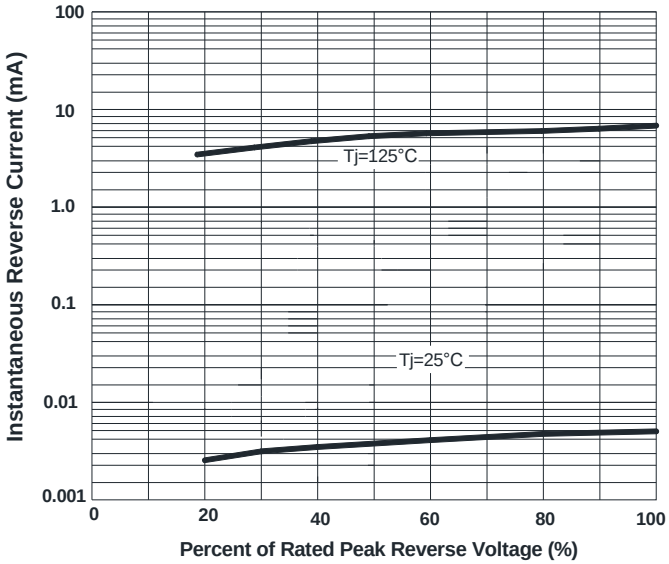
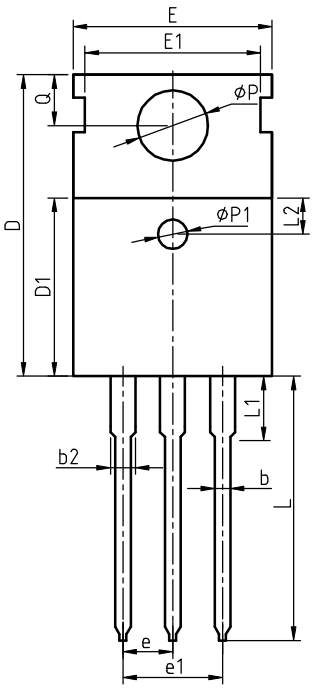
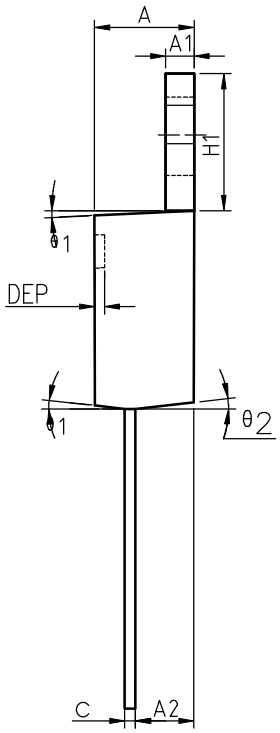


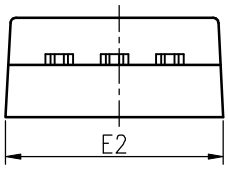

FIG.4: Instantaneous Reverse Characteristics



## Package Information
## TO-220C(TO-220AB-3)




COMMON DIMENSIONS

| SYMBOL | MIN | NOM | MAX | MIN | NOM | MAX |
|---|---|---|---|---|---|---|
| A | 4.40 | 4.57 | 4.70 | 0.173 | 0.180 | 0.185 |
| A1 | 1.27 | 1.30 | 1.33 | 0.050 | 0.051 | 0.052 |
| A2 | 2.35 | 2.40 | 2.50 | 0.093 | 0.094 | 0.098 |
| b | 0.77 | 0.80 | 0.90 | 0.030 | 0.031 | 0.035 |
| b2 | 1.17 | 1.27 | 1.36 | 0.046 | 0.050 | 0.054 |
| c | 0.48 | 0.50 | 0.56 | 0.019 | 0.020 | 0.022 |
| D | 15.40 | 15.60 | 15.80 | 0.606 | 0.614 | 0.622 |
| D1 | 9.00 | 9.10 | 9.20 | 0.354 | 0.358 | 0.362 |
| DEP | 0.05 | 0.10 | 0.20 | 0.002 | 0.004 | 0.008 |
| E | 9.80 | 10.00 | 10.20 | 0.386 | 0.394 | 0.402 |
| E1 | - | 8.70 | - | - | 0.343 | - |
| E2 | 9.80 | 10.00 | 10.20 | 0.386 | 0.394 | 0.402 |
| e | | 2.54 | BSC | | 0.100 | BSC |
| e1 | | 5.08 | BSC | | 0.200 | BSC |
| H1 | 6.40 | 6.50 | 6.60 | 0.252 | 0.256 | 0.260 |
| L | 12.75 | 13.50 | 13.65 | 0.502 | 0.531 | 0.537 |
| L1 | - | 3.10 | 3.30 | - | 0.122 | 0.130 |
| L2 | | 2.50 | REF | | 0.098 | REF |
| P | 3.50 | 3.60 | 3.63 | 0.138 | 0.142 | 0.143 |
| P1 | 3.50 | 3.60 | 3.63 | 0.138 | 0.142 | 0.143 |
| Q | 2.73 | 2.80 | 2.87 | 0.107 | 0.110 | 0.113 |
| θ1 | 5° | 7° | 9° | 5° | 7° | 9° |
| θ2 | 1° | 3° | 5° | 1° | 3° | 5° |
| θ3 | 1° | 3° | 5° | 1° | 3° | 5° |

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## HXY MOSFET:

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