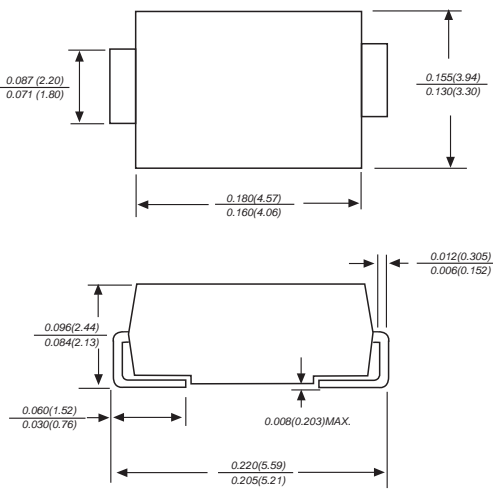


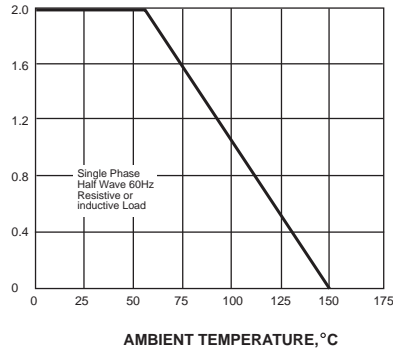
US2A THRU US2M

| <u>SMB/DO-214AA</u> | <u>FEATURES</u> | | | | | | | | | |
|---|--|-------------|------|------|------|-------|------|-------|--------------------|---------------|
|  <p style="text-align: center;"><i>Dimensions in inches and (millimeters)</i></p> | <ul style="list-style-type: none"> ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0 ◆ For surface mounted applications ◆ Ultra fast switching for high efficiency ◆ Low reverse leakage ◆ Built-in strain relief, ideal for automated placement ◆ High forward surge current capability ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals | | | | | | | | | |
| <u>MECHANICAL DATA</u> | | | | | | | | | | |
| <p>Case: JEDEC DO-214AA molded plastic body Terminals: Solder plated, solderable per MIL-STD-750, Method 2026 Polarity: Color band denotes cathode end Mounting Position: Any Weight: 0.003 ounce, 0.093 grams</p> | | | | | | | | | | |
| <u>MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS</u> | | | | | | | | | | |
| Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%. | | | | | | | | | | |
| Catalog Number | SYMBOLS | US2A | US2B | US2D | US2G | US2J | US2K | US2M | UNITS | |
| Maximum repetitive peak reverse voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | VOLTS | |
| Maximum RMS voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | VOLTS | |
| Maximum DC blocking voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | VOLTS | |
| Maximum average forward rectified current at $T_L=75^\circ\text{C}$ | $I_{(AV)}$ | 2.0 | | | | | | | Amps | |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 50.0 | | | | | | | Amps | |
| Maximum instantaneous forward voltage at 2.0A | V_F | 1.0 | | 1.4 | 1.7 | | | Volts | | |
| Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$ | I_R | 5.0 | | | | 350.0 | | | | μA |
| Maximum reverse recovery time (NOTE 1) | t_{rr} | 50 | | | | 75 | | | ns | |
| Typical junction capacitance (NOTE 2) | C_J | 28.0 | | | | | | | pF | |
| Typical thermal resistance (NOTE 3) | $R_{\theta JA}$ | 20.0 | | | | | | | $^\circ\text{C/W}$ | |
| Operating junction and storage temperature range | T_J, T_{STG} | -50 to +150 | | | | | | | $^\circ\text{C}$ | |

US2A THRU US2M

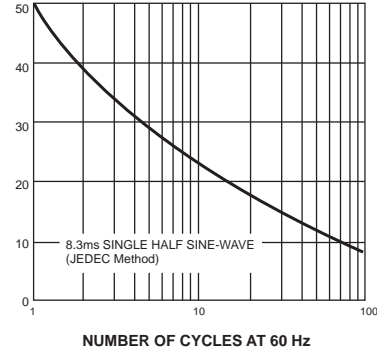
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



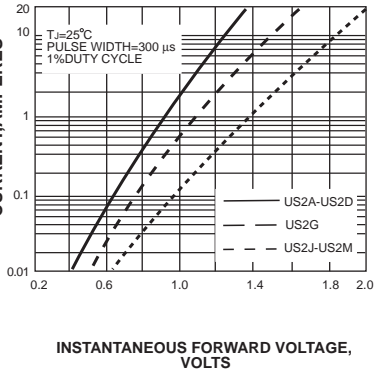
PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



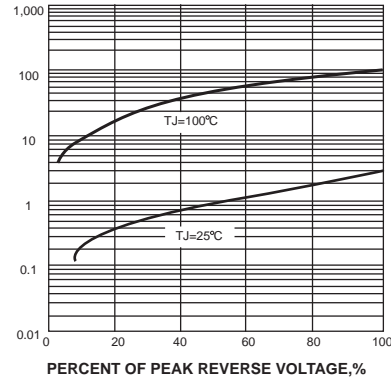
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



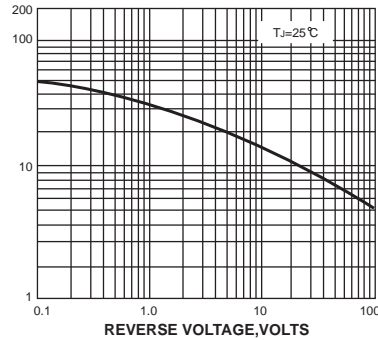
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



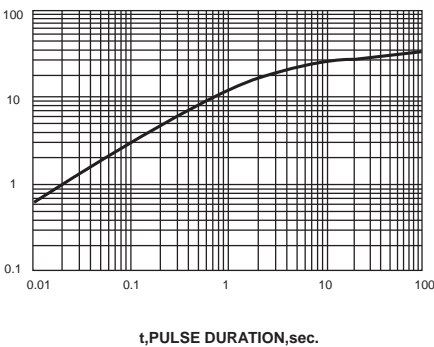
JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, $^\circ\text{C}/\text{W}$

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Rectifiers](#) category:

Click to view products by [Yongyutai Electronics](#) manufacturer:

Other Similar products are found below :

[70HFR40](#) [FR105 R0](#) [RL252-TP](#) [1N5397](#) [JANTX1N5634A](#) [1N4002G](#) [1N4005-TR](#) [JANS1N6640US](#) [481235F](#) [RRE02VS6SGTR](#) [067907F](#)
[MS306](#) [US2JFL-TP](#) [A1N5404G-G](#) [CRS12\(T5L,TEMQ\)](#) [ACGRB207-HF](#) [CLH07\(TE16L,Q\)](#) [CLH03\(TE16L,Q\)](#) [ACGRC307-HF](#)
[ACEFC304-HF](#) [DZ-1380](#) [NTE6356](#) [NTE6359](#) [JAN1N5555](#) [85HFR60](#) [40HFR60](#) [70HF120](#) [85HFR80](#) [D126A45C](#) [SCF7500](#) [SCHJ22.5K](#)
[SM100](#) [SCPA2](#) [SDHD5K](#) [ACGRA4001-HF](#) [D1821SH45T PR](#) [D1251S45T](#) [NTE6358](#) [NTE5850](#) [NTE5819](#) [NTE5837](#) [NTE5892](#) [NTE5900](#)
[NTE5911](#) [NTE5915](#) [NTE5921](#) [NTE6104](#) [NTE6105](#) [NTE6154](#) [NTE6158](#)