



4A05-4A10 General Purpose Rectifier

Feature

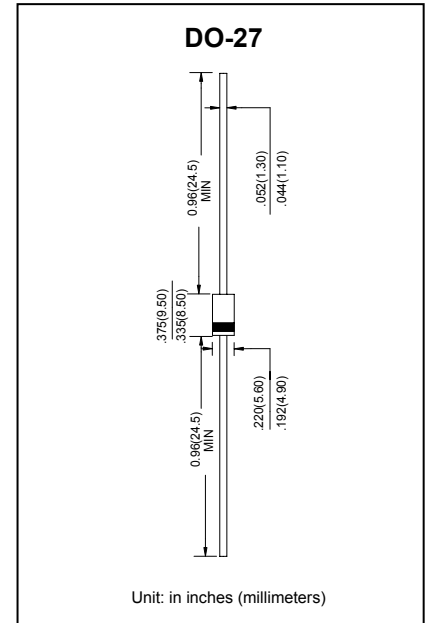
- I_o 4A
- V_{RRM} 50V-1000V
- Low reverse leakage
- High surge current capability

Application

- Rectifier

Application

- 4AX
X : From 05 To 10



ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

| Parameter | Symbol | 4A | | | | | | | Unit |
|---|-------------|------------|-----|-----|-----|-----|-----|------|------------------|
| | | 05 | 1 | 2 | 4 | 6 | 8 | 10 | |
| Repetitive Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Forward Current 60Hz Half-sine wave, Resistance load, $T_a=50^\circ\text{C}$ | $I_{F(AV)}$ | 4 | | | | | | | A |
| Non-repetitive Peak Forward Surge Current 60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$ | I_{FSM} | 250 | | | | | | | A |
| Junction Temperature | T_J | -55 ~ +125 | | | | | | | $^\circ\text{C}$ |
| Storage Temperature | T_{STG} | -55 ~ +150 | | | | | | | $^\circ\text{C}$ |

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise noted)

| Parameter | Symbol | Test Condition | Max | Unit | |
|---------------------------------|------------------|------------------------------|-------------------------|--------------------|---------------|
| Peak Forward voltage | V_{FM} | $I_{FM}=4A$ | 0.95 | V | |
| Peak Reverse Current | I_{RRM1} | $V_{RM}=V_{RRM}$ | $T_a=25^\circ\text{C}$ | 5 | μA |
| | I_{RRM2} | | $T_a=125^\circ\text{C}$ | 50 | μA |
| Thermal Resistance (Typical) | $R_{\theta J-A}$ | Between junction and ambient | 20 | $^\circ\text{C/W}$ | |
| | $R_{\theta J-L}$ | Between junction and lead | 10 | $^\circ\text{C/W}$ | |

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

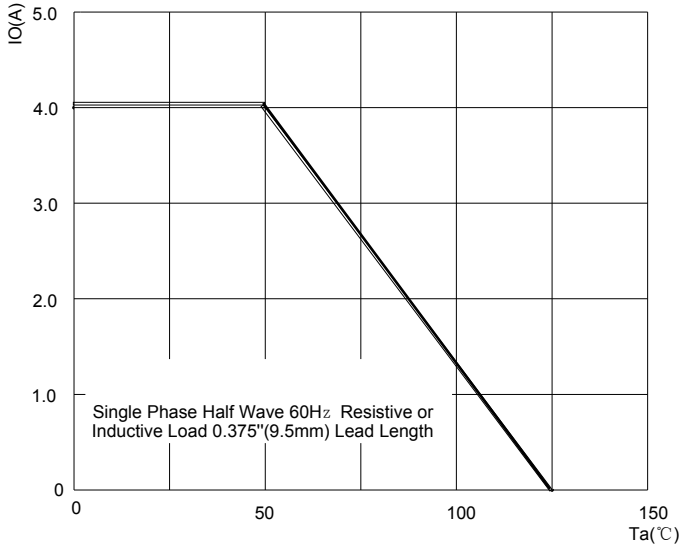


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

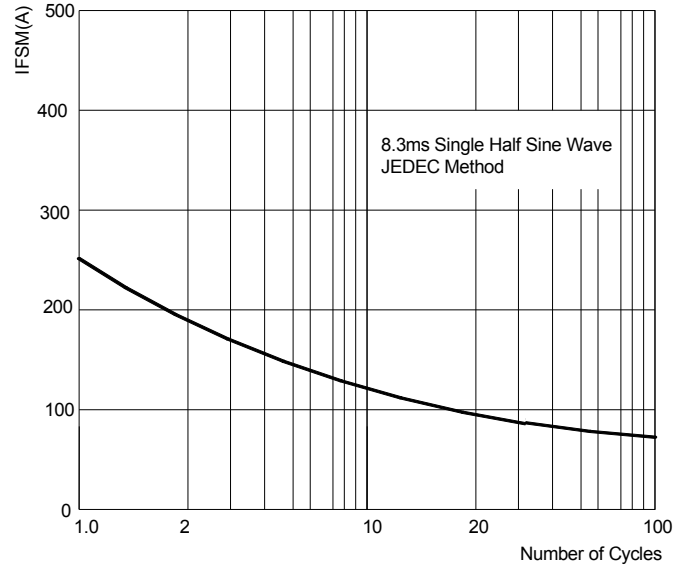


FIG.3: TYPICAL FORWARD CHARACTERISTICS

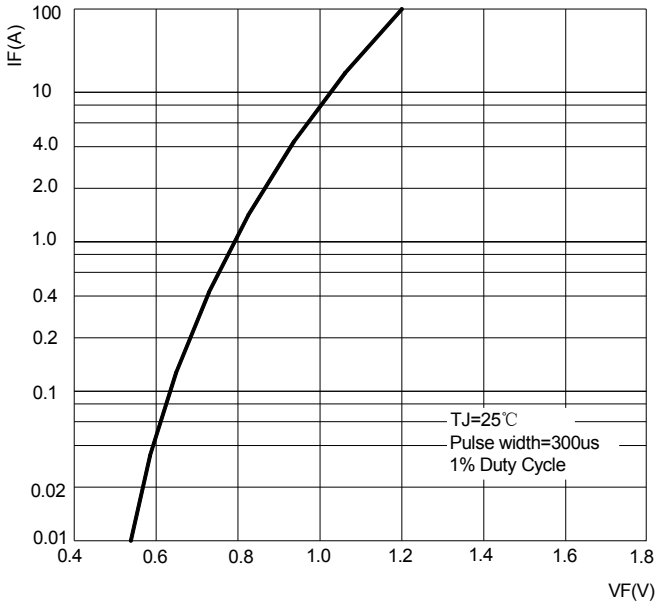


FIG.4: TYPICAL REVERSE CHARACTERISTICS

