

General Purpose Rectifier

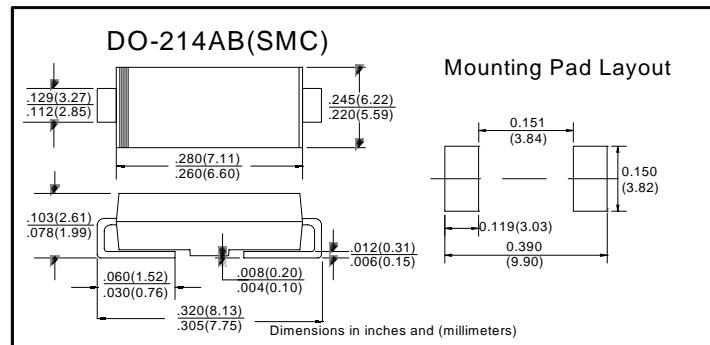
■ Features

- I_o 5.0A
- V_{RRM} 50V-1000V
- High surge current capability
- Cases: Molded plastic

■ Applications

- Rectifier

■ Outline Dimensions and Mark



■ Limiting Values (Absolute Maximum Rating)

| Item | Symbol | Unit | Test Conditions | S5 | | | | | | |
|--------------------------------------|-------------|------------------|---|----|-----|-----|-----|-----|-----|------------|
| | | | | A | B | D | G | J | K | M |
| Repetitive Peak Reverse Voltage | V_{RRM} | V | | 50 | 100 | 200 | 400 | 600 | 800 | 1000 |
| Average Forward Current | $I_{F(AV)}$ | A | 60HZ Half-sine wave, Resistance load, $T_L=110^\circ\text{C}$ | | | | | | | 5.0 |
| Surge(Non-repetitive)Forward Current | I_{FSM} | A | 60Hz Half-sine wave ,1 cycle , $T_a=25^\circ\text{C}$ | | | | | | | 150 |
| Junction Temperature | T_J | $^\circ\text{C}$ | | | | | | | | -55~+150 |
| Storage Temperature | T_{STG} | $^\circ\text{C}$ | | | | | | | | -55 ~ +150 |

■ Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

| Item | Symbol | Unit | Test Condition | S5 | | | | | | | |
|-----------------------------|------------------|---------------------------|-------------------------------|-------------------------|------------------|---|---|---|---|---|--|
| | | | | A | B | D | G | J | K | M | |
| Peak Forward Voltage | V_F | V | $I_F=5.0\text{A}$ | 1.00 | | | | | | | |
| Peak Reverse Current | I_{RRM1} | μA | $V_{RM}=V_{RRM}$ | $T_a=25^\circ\text{C}$ | 5 | | | | | | |
| | I_{RRM2} | | | $T_a=100^\circ\text{C}$ | 100 | | | | | | |
| Thermal Resistance(Typical) | $R_{\theta J-A}$ | $^\circ\text{C}/\text{W}$ | Between junction and ambient | | 47 ¹⁾ | | | | | | |
| | $R_{\theta J-L}$ | | Between junction and terminal | | 13 ¹⁾ | | | | | | |

Notes:

- 1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas

■ Characteristics(Typical)

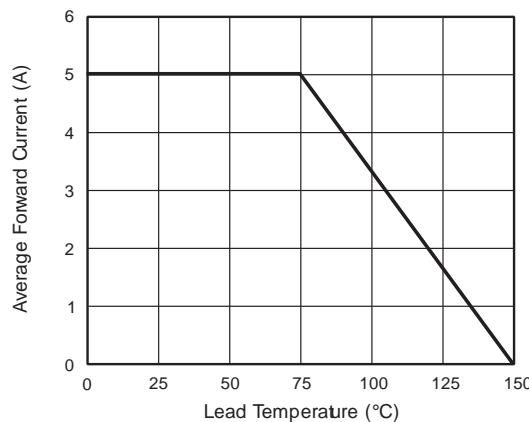


Fig. 1 –Forward Current Derating Curve

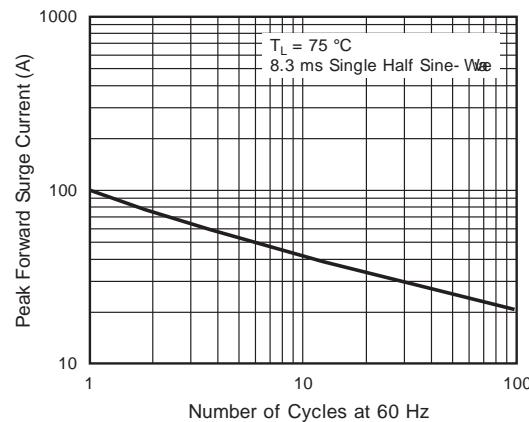


Fig. 2 –Maximum Non-Repetitive Peak Forward Surge Current

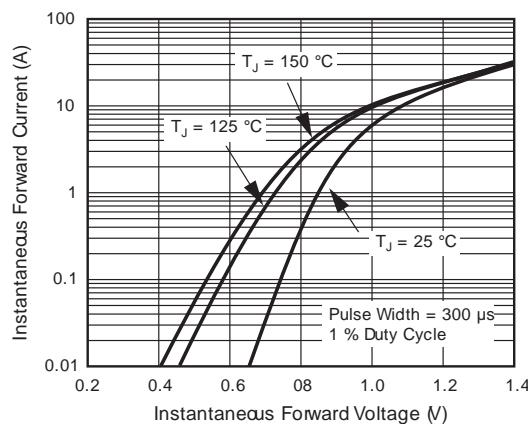


Fig. 3 – Typical Instantaneous Forward Characteristics

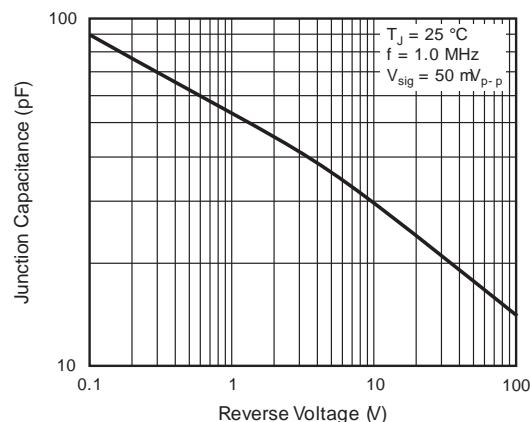


Fig. 5 – Typical Junction Capacitance

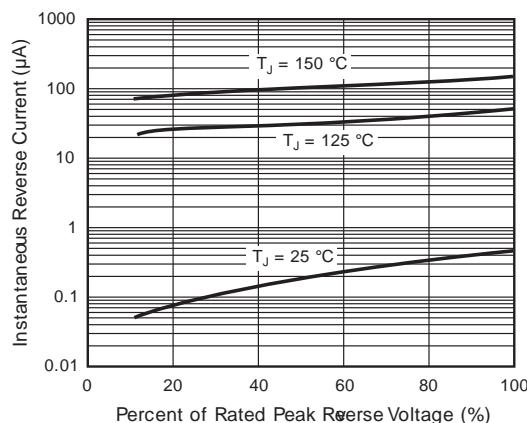


Fig. 4 – Typical Reverse Characteristics