## THERMAL PERFORMANCE

| PARAMETER | SYMBOL | TYP | UNIT |
|---|---|---|---|
| Junction-to-ambient thermal resistance | $R_{\Theta JA}$ | 55 | °C/W |
| Junction-to-lead thermal resistance | $R_{\Theta JL}$ | 18 | °C/W |

## ELECTRICAL SPECIFICATIONS (TA = 25°C unless otherwise noted)

| PARAMETER | | CONDITIONS | SYMBOL | TYP | MAX | UNIT |
|---|---|---|---|---|---|---|
| Forward voltage[1] | | $I_F$ = 2A, $T_J$ = 25°C | $V_F$ | - | 1.3 | V |
| Reverse current @ rated $V_R$[2] | | $T_J$ = 25°C | $I_R$ | - | 5 | μA |
| | | $T_J$ = 125°C | | - | 50 | μA |
| Junction capacitance | | 1MHz, $V_R$ = 4.0V | $C_J$ | 50 | - | pF |
| Reverse recovery time | RS2A | $I_F$ = 0.5A, $I_R$ = 1.0A, $I_{rr}$ = 0.25A | $t_{rr}$ | - | 150 | ns |
| | RS2B | | | | | |
| | RS2D | | | | | |
| | RS2G | | | | | |
| | RS2J | | | - | 250 | ns |
| | RS2K | | | - | 500 | ns |
| | RS2M | | | | | |

**Notes:**

1. Pulse test with PW = 0.3ms
2. Pulse test with PW = 30ms

## ORDERING INFORMATION

| ORDERING CODE[1] | PACKAGE | PACKING |
|---|---|---|
| RS2x | DO-214AA (SMB) | 3,000 / Tape & Reel |

**Notes:**

1. "x" defines voltage from 50V(RS2A) to 1000V(RS2M)

## CHARACTERISTICS CURVES

($T_A$ = 25°C unless otherwise noted)

**Fig.1 Forward Current Derating Curve**

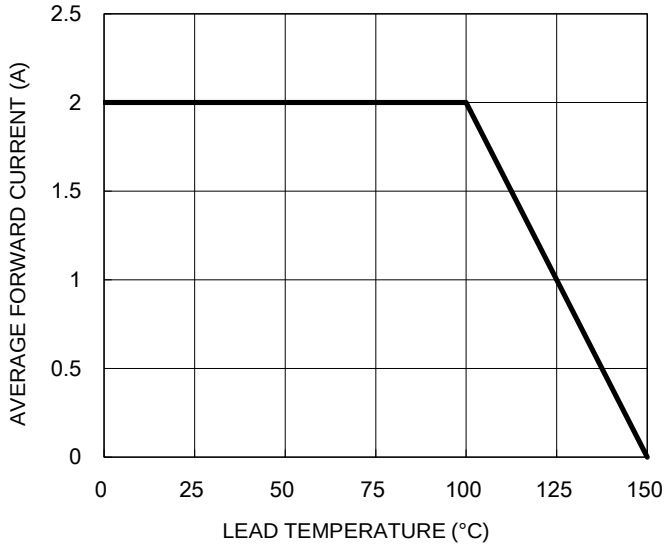



**Fig.2 Typical Junction Capacitance**

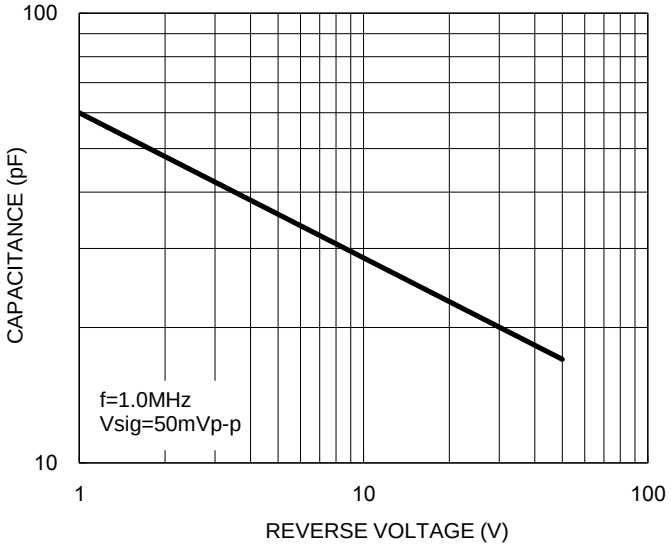



**Fig.3 Typical Reverse Characteristics**

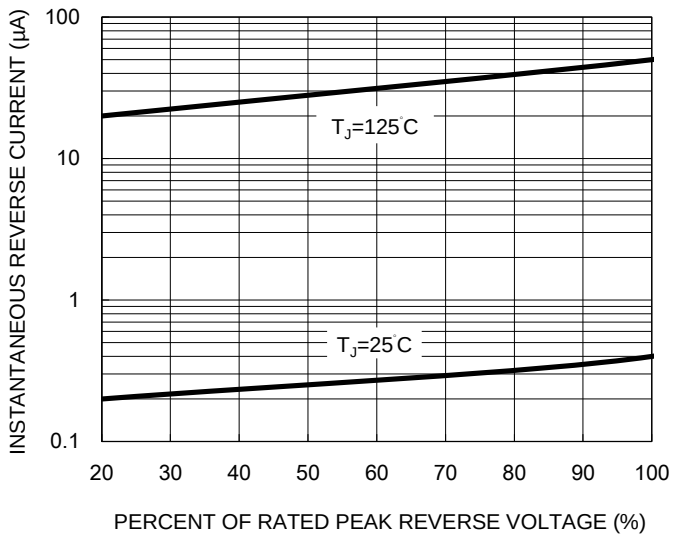
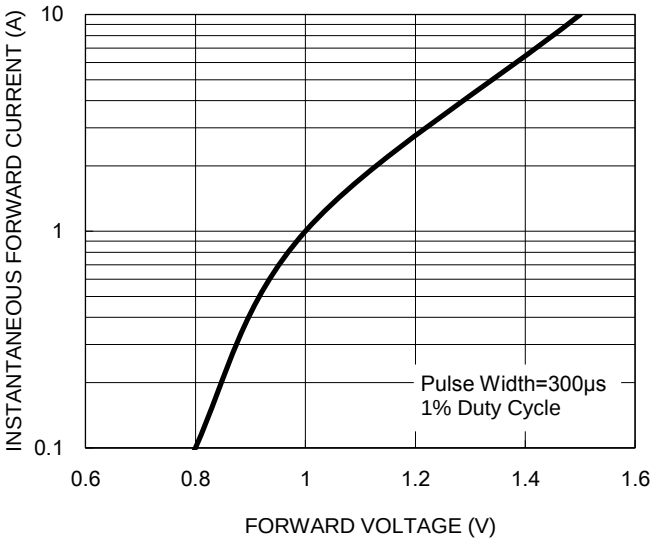



**Fig.4 Typical Forward Characteristics**



## CHARACTERISTICS CURVES

($T_A$ = 25°C unless otherwise noted)

**Fig.5 Maximum Non-Repetitive Forward Surge Current**

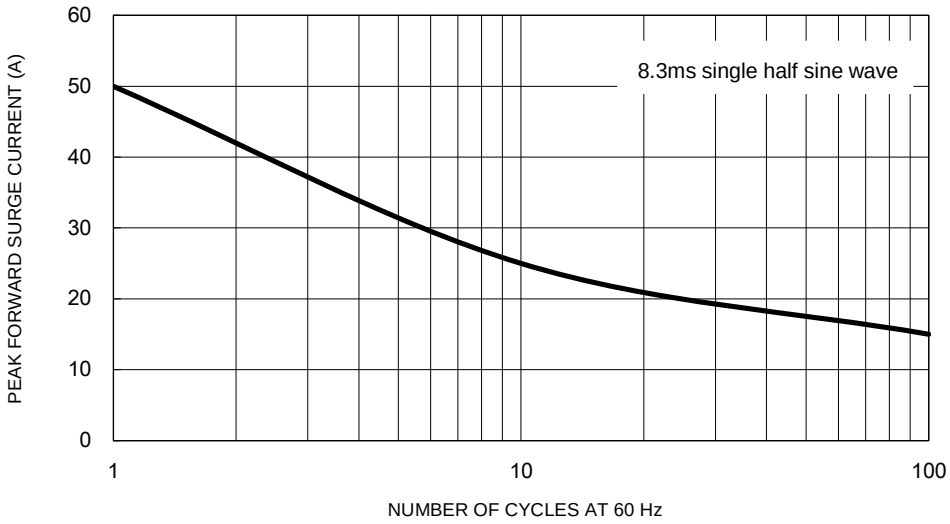
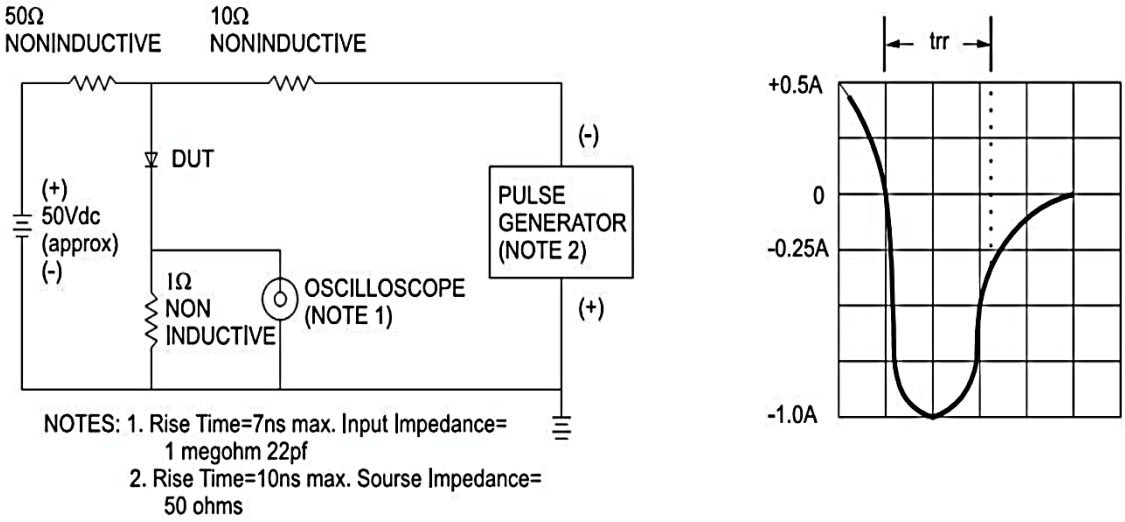
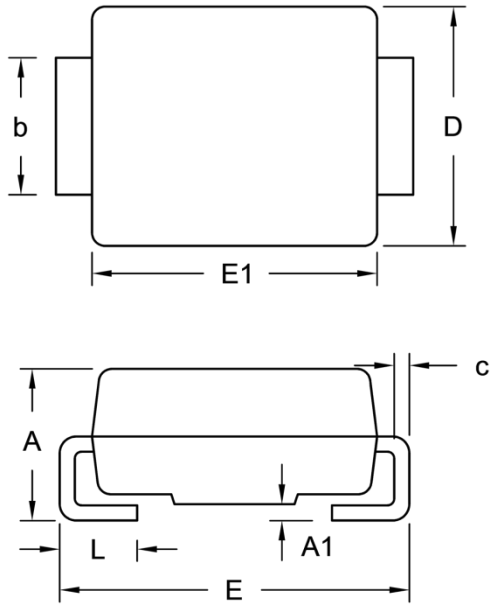



**Fig.6 Reverse Recovery Time Characteristic and Test Circuit Diagram**



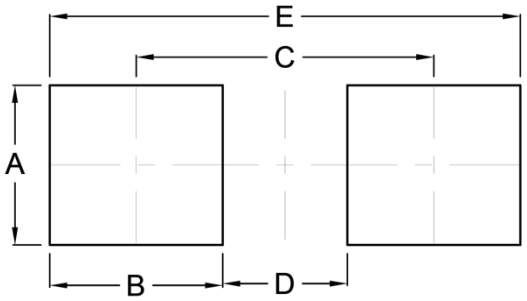
## PACKAGE OUTLINE DIMENSIONS

DO-214AA (SMB)




| DIM. | Unit (mm) | | Unit (inch) | |
|---|---|---|---|---|
| | Min. | Max. | Min. | Max. |
| A | 1.95 | 2.65 | 0.077 | 0.104 |
| A1 | 0.05 | 0.20 | 0.002 | 0.008 |
| b | 1.95 | 2.20 | 0.077 | 0.087 |
| c | 0.15 | 0.31 | 0.006 | 0.012 |
| D | 3.30 | 3.95 | 0.130 | 0.156 |
| E | 5.10 | 5.60 | 0.201 | 0.220 |
| E1 | 4.05 | 4.60 | 0.159 | 0.181 |
| L | 0.75 | 1.60 | 0.030 | 0.063 |

## SUGGESTED PAD LAYOUT




| Symbol | Unit (mm) | Unit (inch) |
|---|---|---|
| A | 2.30 | 0.091 |
| B | 2.50 | 0.098 |
| C | 4.30 | 0.169 |
| D | 1.80 | 0.071 |
| E | 6.80 | 0.268 |

## MARKING DIAGRAM


P/N = Marking Code
G = Green Compound
YW = Date Code
F = Factory Code

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