

THERMAL PERFORMANCE

| PARAMETER | SYMBOL | TYP | UNIT |
|--|-----------------|-----|------|
| Junction-to-lead thermal resistance | $R_{\theta JL}$ | 28 | °C/W |
| Junction-to-ambient thermal resistance | $R_{\theta JA}$ | 88 | °C/W |

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

| PARAMETER | CONDITIONS | SYMBOL | TYP | MAX | UNIT | | | |
|--------------------------------|--|--|-------|--------------------------|-------|----|-----|----|
| Forward voltage ⁽¹⁾ | SS12 SS13 SS14 | $I_F = 1\text{A}, T_J = 25^\circ\text{C}$ | V_F | - | 0.50 | V | | |
| | SS15 SS16 | | | - | 0.75 | V | | |
| | SS19 SS110 | | | - | 0.80 | V | | |
| | SS115 | | | - | 0.95 | V | | |
| | SS12 SS13 SS14 | $I_F = 1\text{A}, T_J = 100^\circ\text{C}$ | | - | 0.40 | V | | |
| | SS15 SS16 | | | - | 0.65 | V | | |
| | SS19 SS110 | | | - | 0.70 | V | | |
| | SS115 | | | - | 0.85 | V | | |
| | Reverse current @ rated V_R ⁽²⁾ | SS12 SS13 SS14 SS15 SS16 | | $T_J = 25^\circ\text{C}$ | I_R | - | 0.2 | mA |
| | | SS19 SS110 SS115 | | | | - | 0.1 | mA |
| SS12 SS13 SS14 | | $T_J = 100^\circ\text{C}$ | - | 6 | | mA | | |
| SS15 SS16 | | | - | 5 | | mA | | |
| SS19 SS110 SS115 | | | - | - | | mA | | |
| SS12 SS13 SS14 | | $T_J = 125^\circ\text{C}$ | - | - | | mA | | |
| SS15 SS16 | | | - | - | | mA | | |
| SS19 SS110 SS115 | | | - | 2 | | mA | | |

Notes:

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

ORDERING INFORMATION

| ORDERING CODE⁽¹⁾ | PACKAGE | PACKING |
|------------------------------------|----------------|---------------------|
| SS1x | DO-214AC (SMA) | 7,500 / Tape & Reel |

Notes:

1. “x” defines voltage from 20V(SS12) to 150V(SS115)

CHARACTERISTICS CURVES

($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

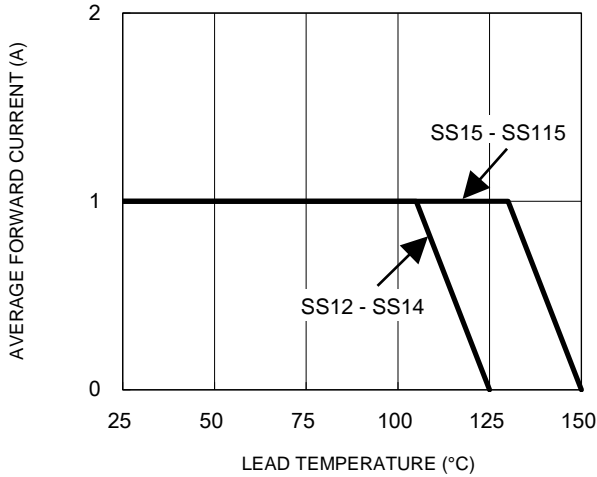


Fig.2 Typical Junction Capacitance

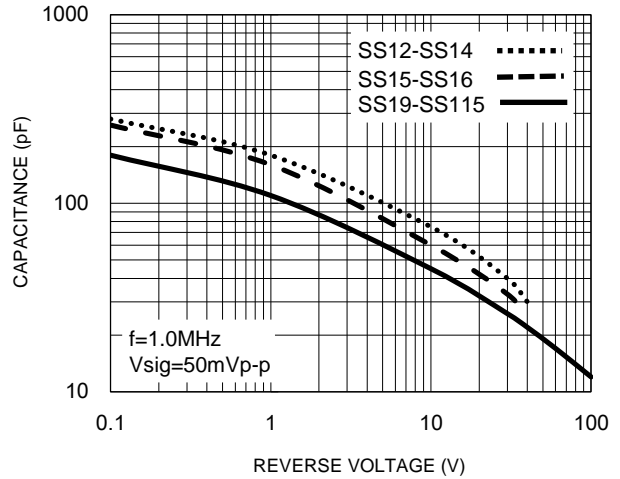


Fig.3 Typical Reverse Characteristics

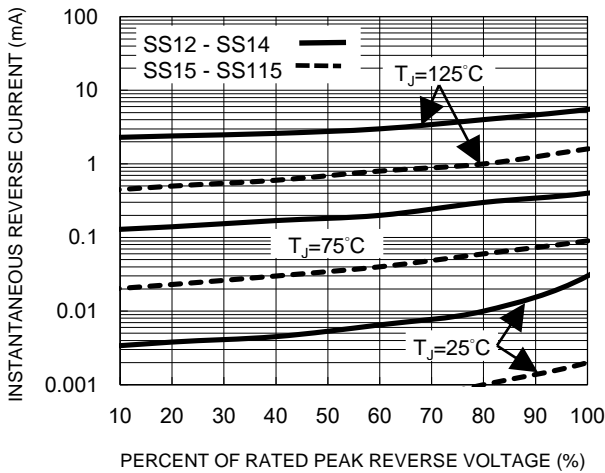


Fig.4 Typical Forward Characteristics

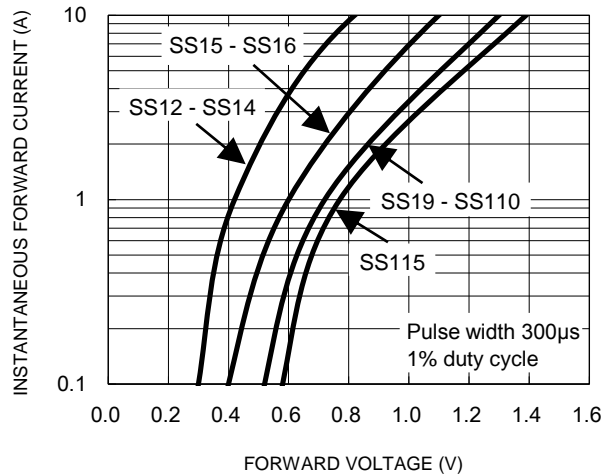
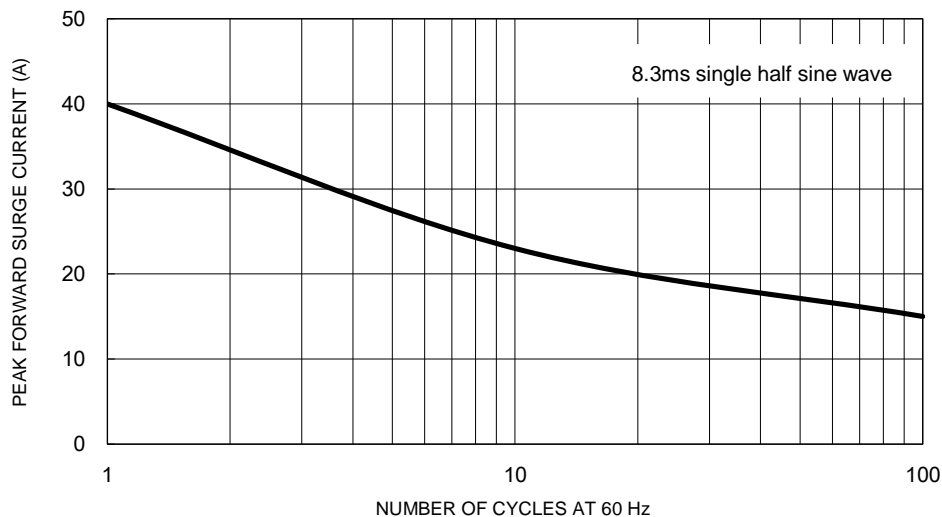


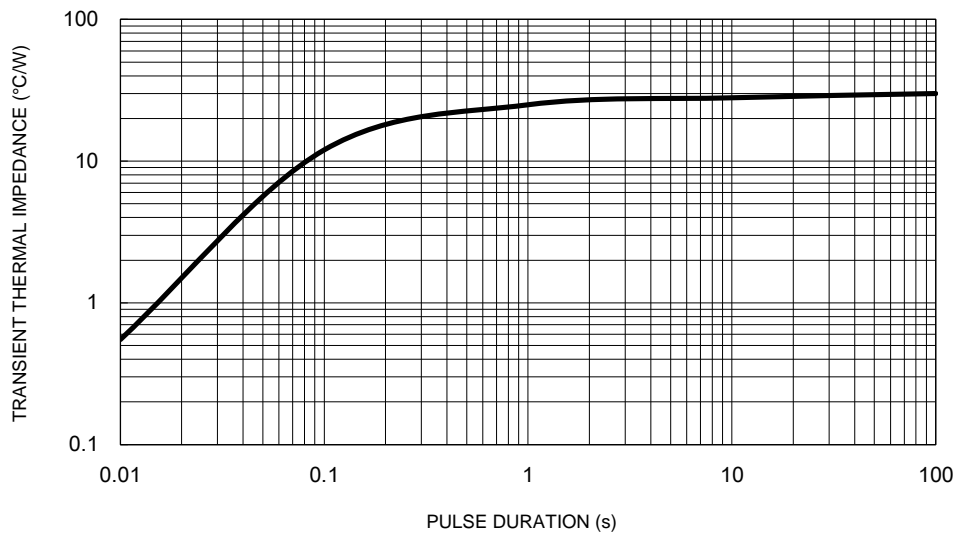
Fig.5 Maximum Non-Repetitive Forward Surge Current



CHARACTERISTICS CURVES

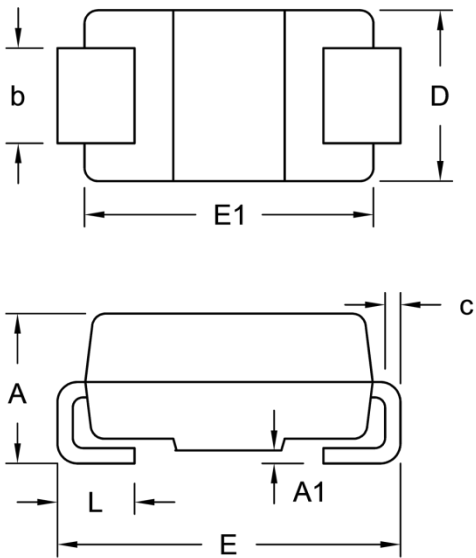
($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig.6 Typical Transient Thermal Characteristics



PACKAGE OUTLINE DIMENSIONS

DO-214AC (SMA)



| DIM. | Unit (mm) | | Unit (inch) | |
|------|-----------|------|-------------|-------|
| | Min. | Max. | Min. | Max. |
| A | 1.99 | 2.50 | 0.078 | 0.098 |
| A1 | 0.10 | 0.20 | 0.004 | 0.008 |
| b | 1.27 | 1.58 | 0.050 | 0.062 |
| c | 0.15 | 0.31 | 0.006 | 0.012 |
| D | 2.29 | 2.83 | 0.090 | 0.111 |
| E | 4.95 | 5.33 | 0.195 | 0.210 |
| E1 | 4.06 | 4.60 | 0.160 | 0.181 |
| L | 0.90 | 1.41 | 0.035 | 0.056 |

SUGGESTED PAD LAYOUT



| Symbol | Unit (mm) | Unit (inch) |
|--------|-----------|-------------|
| A | 1.68 | 0.066 |
| B | 1.52 | 0.060 |
| C | 3.93 | 0.155 |
| D | 2.41 | 0.095 |
| E | 5.45 | 0.215 |

MARKING DIAGRAM



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

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