

| THERMAL PERFORMANCE | | | | | |
|--|-----------------|-----|------|--|--|
| PARAMETER | SYMBOL | TYP | UNIT | | |
| Junction-to-lead thermal resistance | $R_{\Theta JL}$ | 20 | °C/W | | |
| Junction-to-ambient thermal resistance | $R_{\Theta JA}$ | 75 | °C/W | | |

| ELECTRICAL SPECIFICATIONS (TA = 25°C unless otherwise noted) | | | | | | |
|--|------------------------------|--|-----------------|-----|------|------|
| PARAMETER | | CONDITIONS | SYMBOL | TYP | MAX | UNIT |
| Forward voltage ⁽¹⁾ | ES2A ES2B ES2C ES2D | - I _F = 2A, T _J = 25°C | V _F | - | 0.95 | V |
| | ES2F ES2G | | | - | 1.30 | V |
| | ES2H ES2J | | | - | 1.70 | V |
| D | | T _J = 25°C | | - | 10 | μΑ |
| Reverse current @ rated V _R ⁽²⁾ | | T _J = 125°C | l _R | - | 350 | μA |
| Junction capacitance | ES2A ES2B ES2C ES2D | 1MHz, V _R = 4.0V | CJ | 25 | - | pF |
| | ES2F ES2G ES2H ES2J | | | 20 | - | pF |
| Reverse recovery time | • | $I_F = 0.5A, I_R = 1.0A,$ $I_{rr} = 0.25A$ | t _{rr} | | 35 | ns |

Notes:

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

| ORDERING INFORMATION | | | | |
|------------------------------|----------------|---------------------|--|--|
| ORDERING CODE ⁽¹⁾ | PACKAGE | PACKING | | |
| ES2x | DO-214AA (SMB) | 3,000 / Tape & Reel | | |

Notes:

1. "x" defines voltage from 50V(ES2A) to 600V(ES2J)



CHARACTERISTICS CURVES

(T_A = 25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

Fig.2 Typical Junction Capacitance

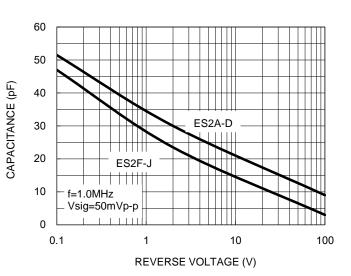


Fig.3 Typical Reverse Characteristics

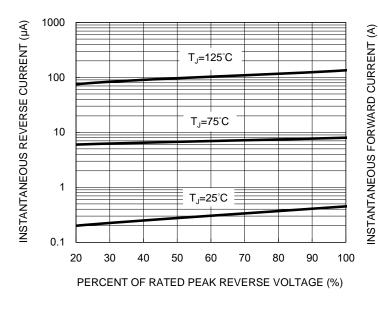
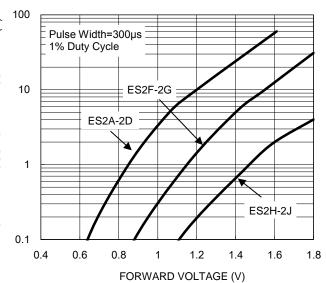


Fig.4 Typical Forward Characteristics





CHARACTERISTICS CURVES

(T_A = 25°C unless otherwise noted)

Fig.5 Maximum Non-Repetitive Forward Surge Current

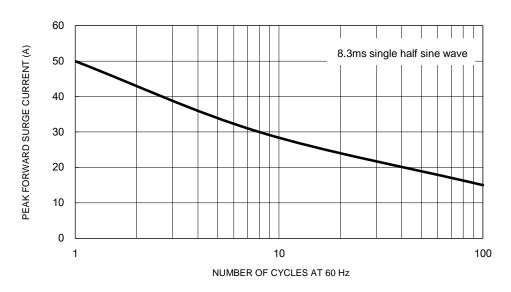
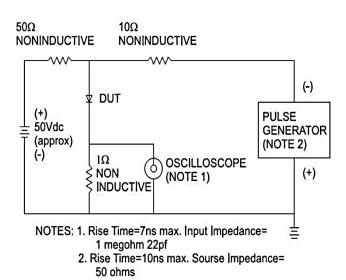
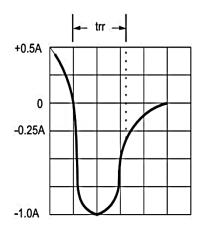


Fig.6 Reverse Recovery Time Characteristic and Test Circuit Diagram



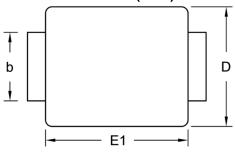


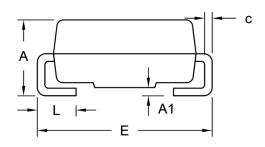




PACKAGE OUTLINE DIMENSIONS

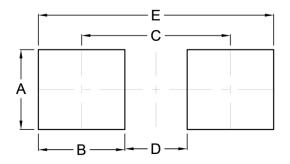
DO-214AA (SMB)





| DIM. | Unit (mm) | | Unit (inch) | |
|--------|-----------|------|-------------|-------|
| DIIVI. | Min. | Max. | Min. | Max. |
| Α | 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 |
| С | 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) |
|--------|-----------|-------------|
| Α | 2.30 | 0.091 |
| В | 2.50 | 0.098 |
| С | 4.30 | 0.169 |
| D | 1.80 | 0.071 |
| E | 6.80 | 0.268 |

MARKING DIAGRAM



= Marking Code P/N G = Green Compound

= Date Code ΥW F = Factory Code



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