

ES2AA THRU ES2MA

REVERSE VOLTAGE 50V~1000V
FORWARD CURRENT 2.0AMP
SUPER FAST RECOVERY RECTIFIER

FEATURES

- * For surface mount applications
- * Glass passivated chip junction
- * Low profile package
- * Super fast recovery time for high efficiency

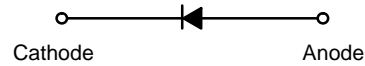
DO- 214AC

SMA



MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V- 0 rate flame retardant
- * Polarity: Color band denotes cathode end
- * Weight: 0.064 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| TYPE NUMBER | ES2AA | ES2BA | ES2CA | ES2DA | ES2FA | ES2GA | ES2JA | ES2KA | ES2MA | UNITS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Repetitive Peak Reverse Voltage | 50 | 100 | 150 | 200 | 300 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | 35 | 70 | 105 | 140 | 210 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | 50 | 100 | 150 | 200 | 300 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current See Fig. 1 | 2.0 | | | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms single half sine- wave superimposed on rated load (JEDEC method) | 50 | | | | | | | | | A |
| Maximum Instantaneous Forward Voltage at 2.0A | 0.92 | | | 1.25 | | 1.7 | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | Ta=25°C | | | | 5.0 | | | | uA | |
| | Ta=125°C | | | | 350 | | | | | |
| Maximum reverse Junction recovery time at If = 0.5A, Ir = 1.0A | 25 | | | | | | | | | nS |
| Typical Junction Capacitance (Note1) | 25 | | | | | | | | | pF |
| Operating Temperature Range Tj | - 55 — +150 | | | | | | | | | °C |
| Storage Temperature Range Tstg | - 55 — +150 | | | | | | | | | °C |

NOTES

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.



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Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

FIG.1 - FORWARD CURRENT DERATING CURVE

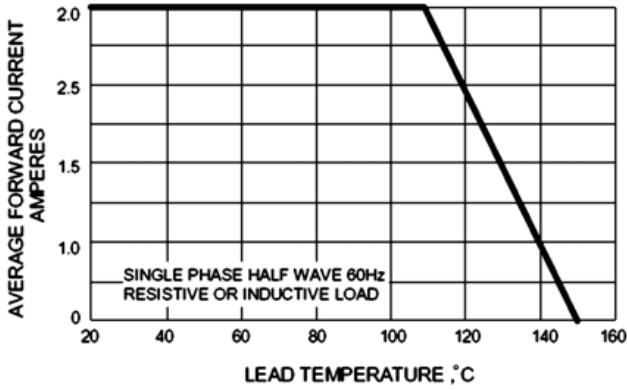


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

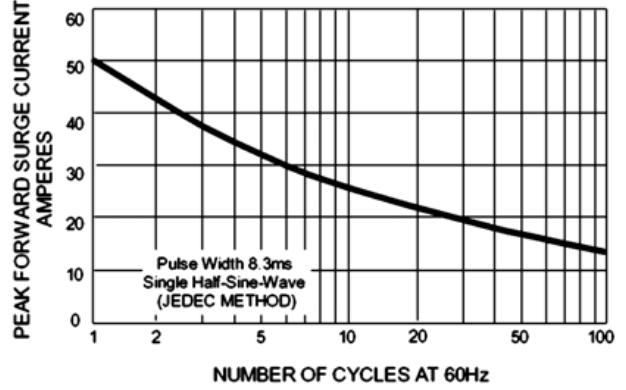


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

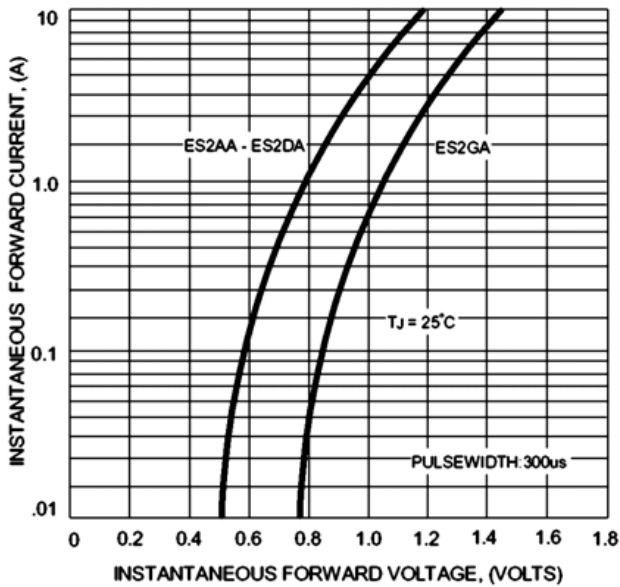
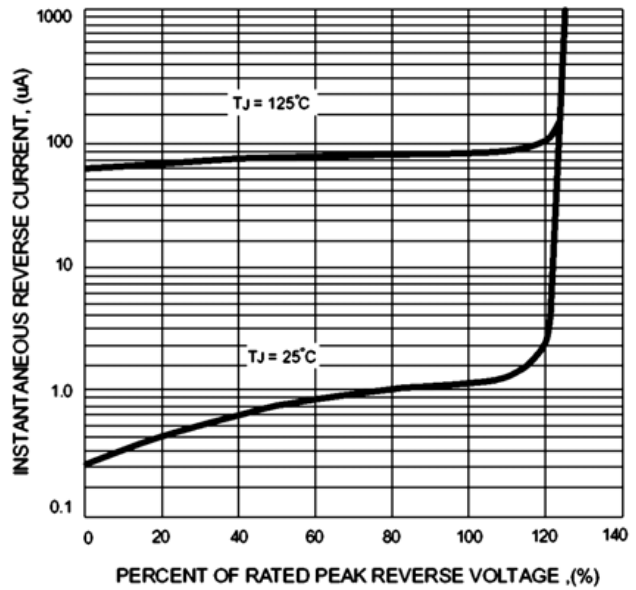


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



Package Dimensions in inches and (millimeters)

