

RS2A THRU RS2M

SURFACE MOUNT FAST RECOVERY RECTIFIERS

Reverse Voltage – 50 to 1000 Volts

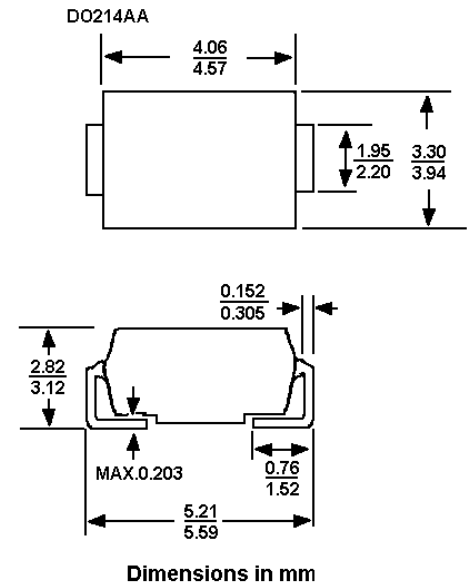
Forward Current – 2.0 Amperes

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Built-in strain relief, ideal for automated placement
- Low reverse leakage
- High forward surge current capability
- For surface mounted applications
- High temperature soldering guaranteed: 250°C/10 seconds at terminals.

Mechanical Data

- **Case:** Molded plastic body, JEDEC DO-214AA
- **Terminals:** Solder plated, solderable per MIL-STD-750, method 2026
- **Polarity:** Color band denotes cathode end.
- **Mounting Position:** Any

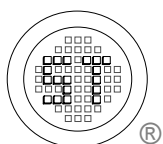


Absolute Maximum Ratings and Characteristics

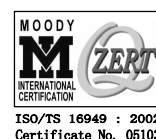
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half-wave 60Hz, resistive or inductive load. For capacitive load current derate by 20%.

	Symbols	RS 2A	RS 2B	RS 2D	RS 2G	RS 2J	RS 2K	RS 2M	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at $T_L = 90^\circ\text{C}$	$I_{(AV)}$	2							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50							A
Maximum instantaneous forward voltage at 2A	V_F	1.3							V
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 100^\circ\text{C}$	I_R	5 50							μA
Maximum reverse recovery time (Note 1)	t_{rr}	150			250		500		ns
Typical junction capacitance (Note 2)	C_J	50							pF
Typical thermal resistance (Note 3)	$R_{\theta JA}$	20							$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-65 to +150							$^\circ\text{C}$
storage temperature range	T_S	-65 to +150							$^\circ\text{C}$

- Notes: 1. Reverse recovery condition $I_F=0.5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 0.25\text{A}$.
 2. Measured at 1MHz and applied reverse voltage of 4V DC.
 3. P.C.B, mounted with 0.2×0.2 " ($5.0 \times 5.0\text{mm}$) copper pad areas.

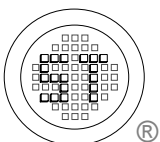
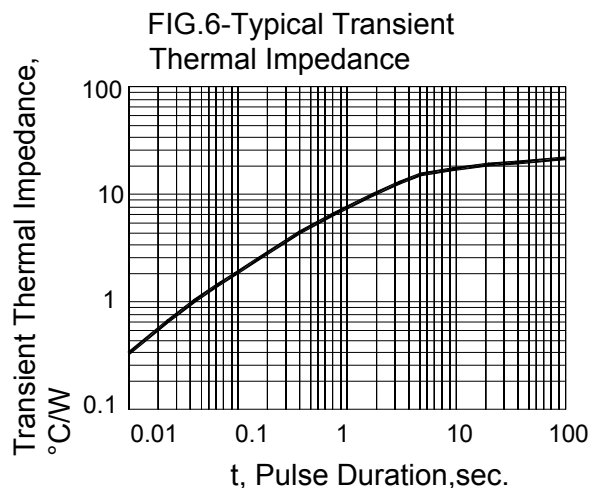
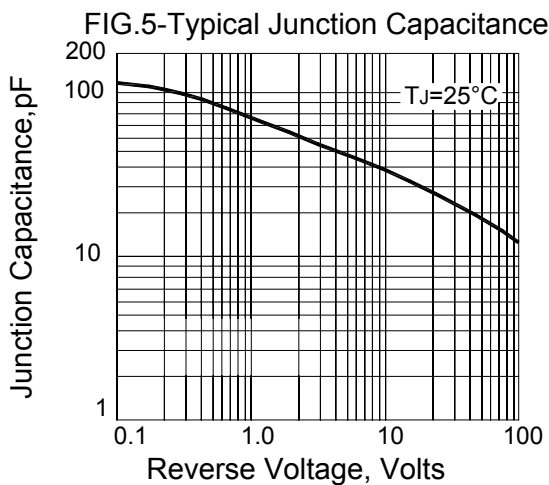
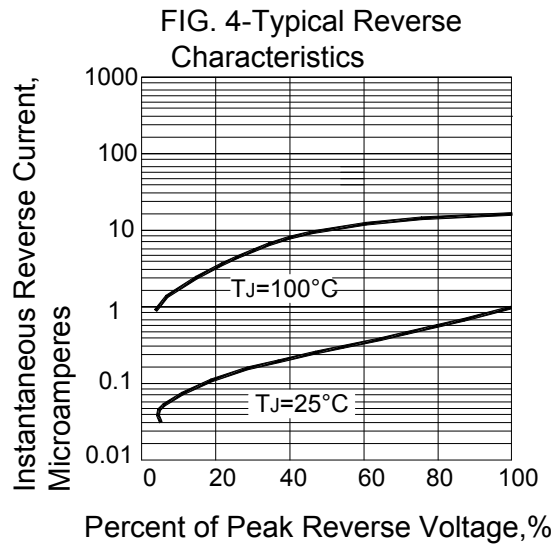
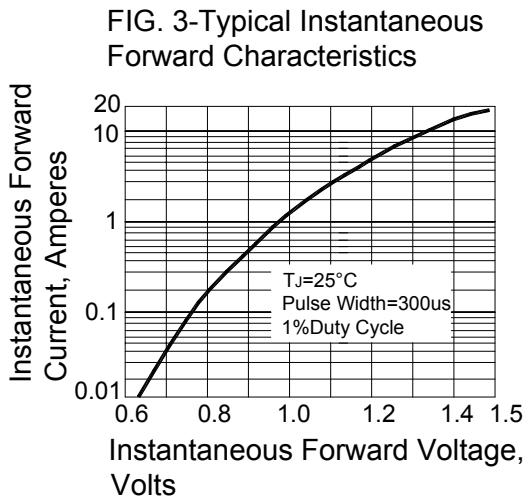
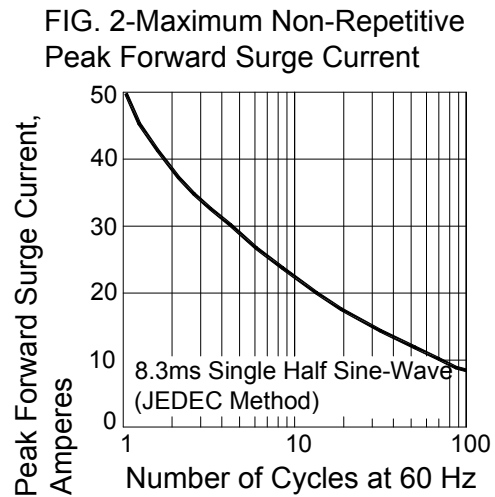
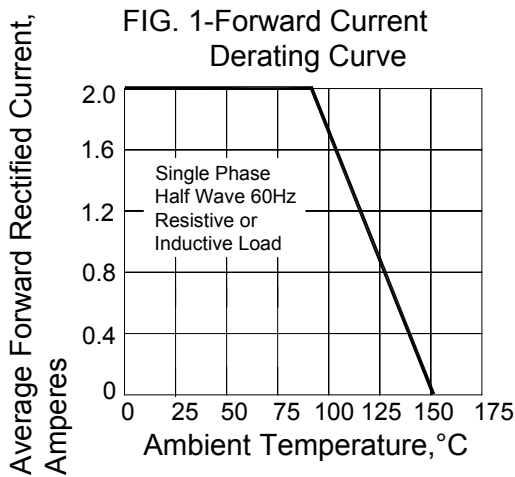


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RATINGS AND CHARACTERISTIC CURVES



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