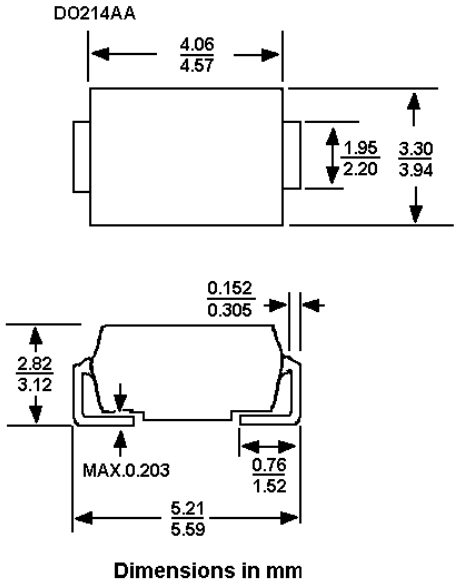
RS2A THRU RS2M

SURFACE MOUNT FAST RECOVERY RECTIFIERS
Reverse Voltage – 50 to 1000 Volts
Forward Current – 2.0 Amperes



Dimensions in mm

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℃/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℃ 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 ^{O}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 ^{O}C at rated DC blocking voltage T_A = 100^{O}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							^{O}C/W
Operating junction temperature range	T_J	-65 to +150							^{O}C
storage temperature range	T_S	-65 to +150							^{O}C

Notes: 1. Reverse recovery condition I_F=0.5A, I_R = 1A, I_{rr} = 0.25A.

2. Measured at 1MH$_Z$ and applied reverse voltage of 4V DC.

3. P.C.B, mounted with 0.2×0.2" (5.0×5.0mm) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES

FIG. 1-Forward Current Derating Curve

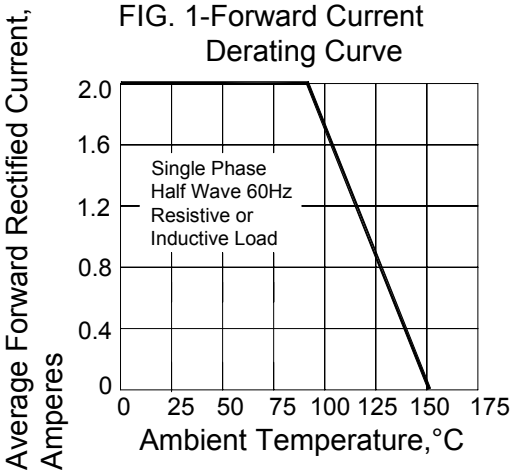


FIG. 2-Maximum Non-Repetitive Peak Forward Surge Current

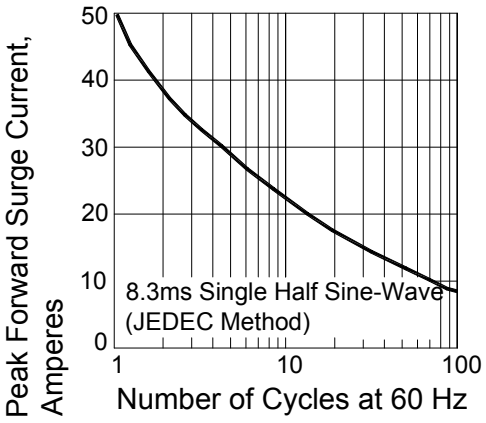


FIG. 3-Typical Instantaneous Forward Characteristics

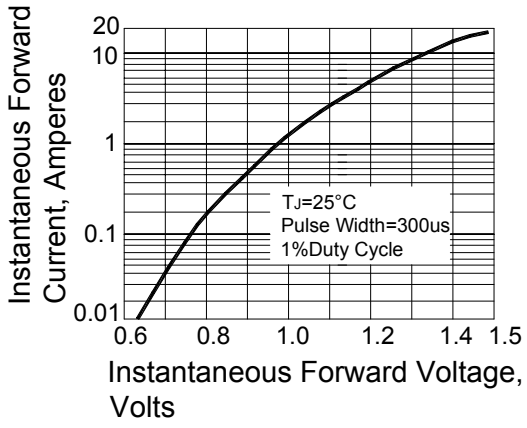


FIG. 4-Typical Reverse Characteristics

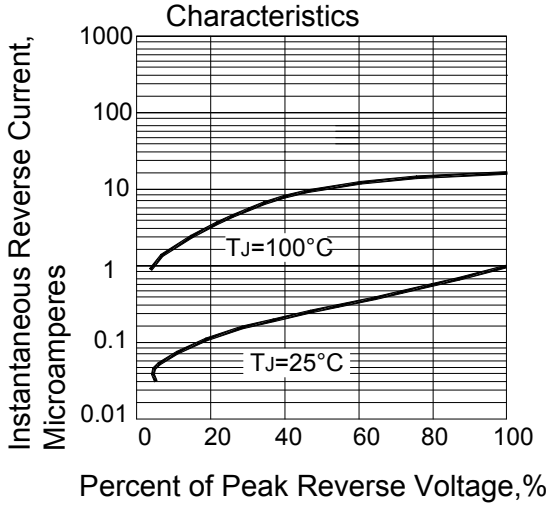


FIG.5-Typical Junction Capacitance

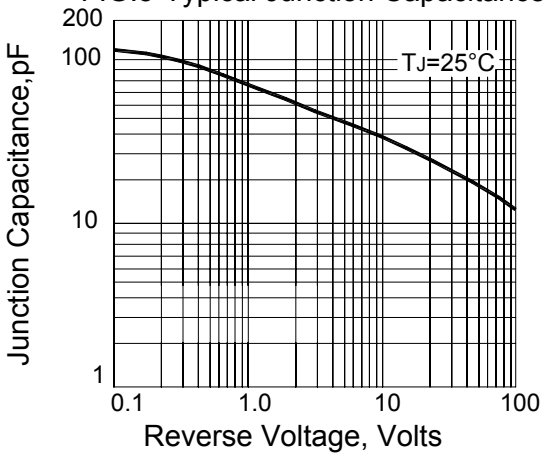


FIG.6-Typical Transient Thermal Impedance

