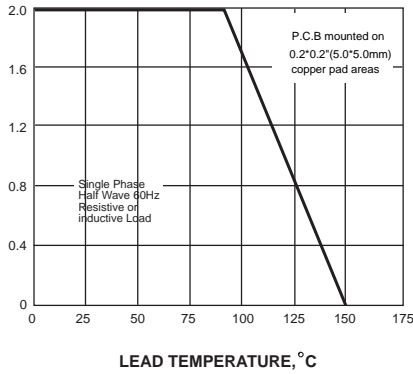


SURFACE MOUNT FAST RECOVERY RECTIFIER	Reverse Voltage - 50 to 1000 Volts Forward Current -2.0 Amperes								
DO-214AA/SMB	Features <ul style="list-style-type: none"> ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0 ◆ For surface mounted applications ◆ Fast switching for high efficiency ◆ Low reverse leakage ◆ Built-in strain relief,ideal for automated placement ◆ High forward surge current capability ◆ High temperature soldering guaranteed: 260°C/10 seconds at terminals 								
<p style="font-size: small;">Dimensions in inches and (millimeters)</p>	Mechanical Data <p>Case: JEDEC DO-214AA molded plastic body Terminals: Solder plated , solderable per MIL-STD-750, Method 2026 Polarity: Color band denotes cathode end Mounting Position: Any Weight:0.005 ounce, 0.138 grams</p>								
MAXIMUM RATINGS AND ELECTRICAL 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	RS2AB	RS2BB	RS2DB	RS2GB	RS2JB	RS2KB	RS2MB	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 $T_L=90^\circ C$	$I_{(AV)}$	2.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50.0							A
Maximum instantaneous forward voltage at 2.0A	V_F	1.3							V
Maximum DC reverse current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=100^\circ C$	I_R	5.0 50.0							μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	150			250	500		ns	
Typical junction capacitance (NOTE 2)	C_J	50.0							pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	20.0							$^\circ C/W$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							$^\circ C$
Note: 1.Reverse recovery condition $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$ 2.Measured at 1MHz and applied reverse voltage of 4.0V D.C. 3.P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas									

RATINGS AND CHARACTERISTIC CURVES RS2AB THRU RS2MB

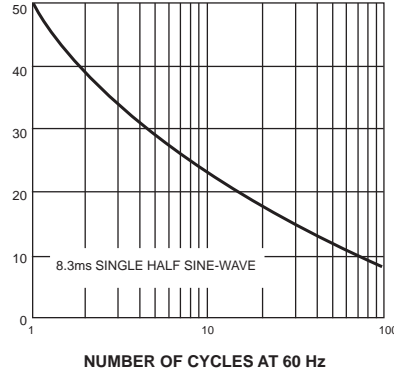
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



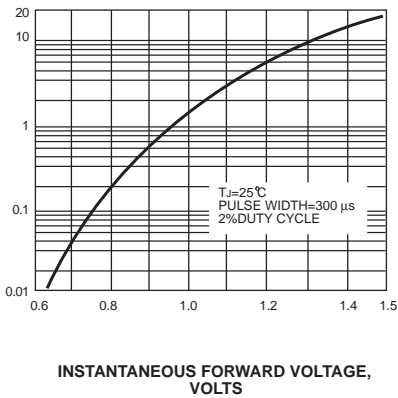
PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



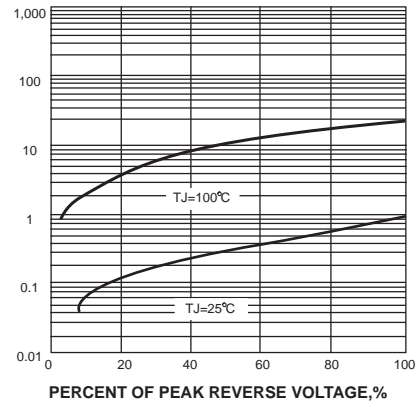
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



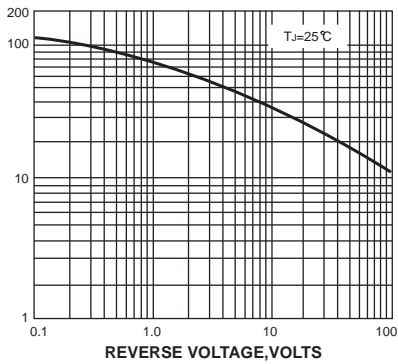
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

