

SURFACE MOUNT ULTRA FAST RECTIFIER	Reverse Voltage - 50 to 1000 Volts Forward Current -3.0 Amperes
<p style="text-align: center;">DO-214AA/SMB</p> <p style="text-align: center;"><i>Dimensions in inches and (millimeters)</i></p>	<p>Features</p> <ul style="list-style-type: none"> ➤ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0 ➤ Idea for printed circuit board ➤ Glass passivated Junction chip ➤ Low reverse leakage ➤ High forward surge current capability ➤ High temperature soldering guaranteed 250°C/10 seconds at terminals <p>Mechanical Data</p> <p>Case : Molded plastic body</p> <p>Terminals : Solder plated, solderable per MIL-STD-750, Method 2026</p> <p>Polarity : Polarity symbol marking on body</p> <p>Mounting Position : Any</p> <p>Weight : 0.0035 ounce, 0.098 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%.

Parameter	SYMBOLS	US3AB	US3BB	US3DB	US3GB	US3JB	US3KB	US3MB	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 =100°C	I _(AV)	3.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	100.0							A
Maximum instantaneous forward voltage at 3.0A	V _F	1.0		1.4		1.7		V	
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =125°C	I _R	5.0 500							uA
Maximum reverse recovery time(Note 1)	T _{rr}	50				75			ns
Typical junction capacitance (Note2)	C _J	65.0							pF
Typical thermal resistance	R _{qJA}	85.0							°C/W
Operating junction and storage temperature range	T _J ,T _{STG}	-55 to +150							°C

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

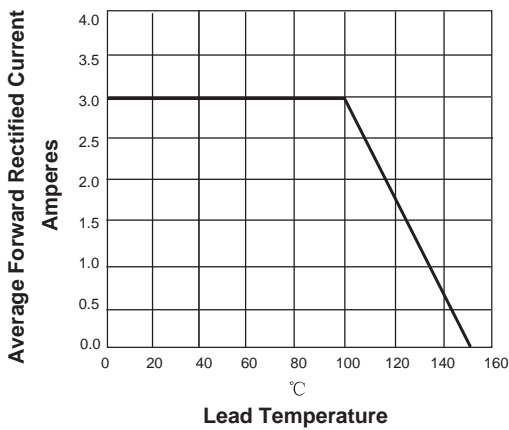


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

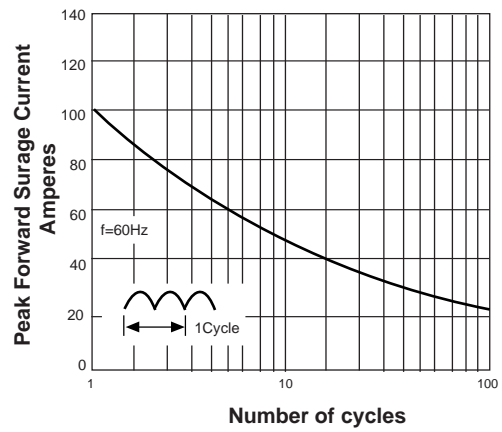


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

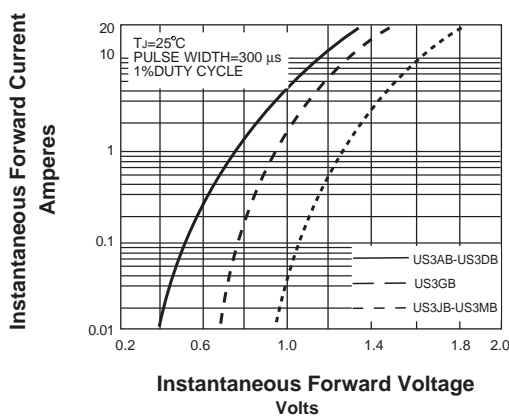


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

