

## Features

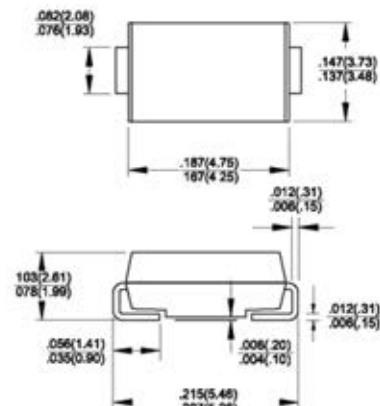
- ◆ Fast switching for high efficiency
- ◆ For surface mounted applications
- ◆ Glass passivated chip
- ◆ Low reverse leakage current
- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ Plastic material has UL flammability classification 94V-0



DO-214AA (SMB)

## Mechanical Data

- ◆ Case : Molded plastic
- ◆ Polarity : Indicated by cathode band
- ◆ Weight : 0.003 ounce, 0.093 gram



## 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, derate current by 20%

Parameter	Symbols	GR3AB	GR3BB	GR3DB	GR3GB	GR3JB	GR3KB	GR3MB	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current @ $T_J = 75^\circ\text{C}$	$I_{(AV)}$					3.0			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{SM}$					100.0			Amps
Maximum forward voltage at 3.0A DC	$V_F$					1.3			Volts
Maximum DC reverse current at rated DC blocking voltage @ $T_J = 25^\circ\text{C}$ @ $T_J = 125^\circ\text{C}$	$I_R$					5.0 250			$\mu\text{A}$
Maximum reverse recovery time (Note 1)	$t_r$					150	250	500	$\mu\text{s}$
Typical junction capacitance (Note 2)	$C_J$					50			pF
Typical thermal resistance (Note 3)	$R_{JA}$ $R_{J\theta}$					50.0 10.0			$^\circ\text{C/W}$
Operating temperature range	$T_J$					-55 to +150			$^\circ\text{C}$
Storage temperature range	$T_{STG}$					-55 to +150			$^\circ\text{C}$

- Notes:**
1. Reverse Recovery Test Conditions:  $I_L = 0.5\text{A}$ ,  $I_H = 1.0\text{A}$ ,  $I_{RM} = 0.25\text{A}$
  2. Measured at 1.0MHz and applied reverse voltage of 4.0V D.C.
  3. Thermal Resistance Junction to Ambient and from Junction to Lead



## RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

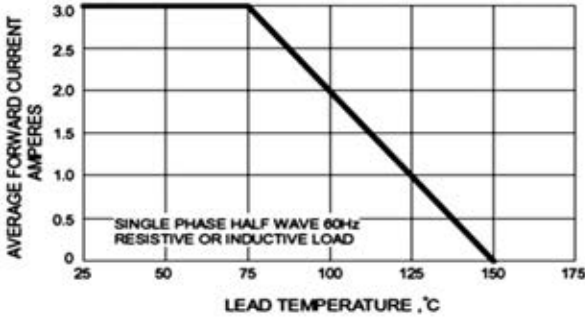


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

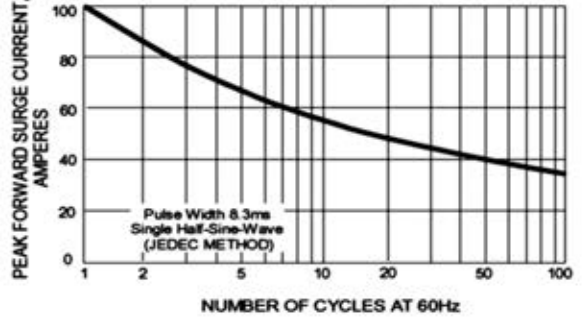


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

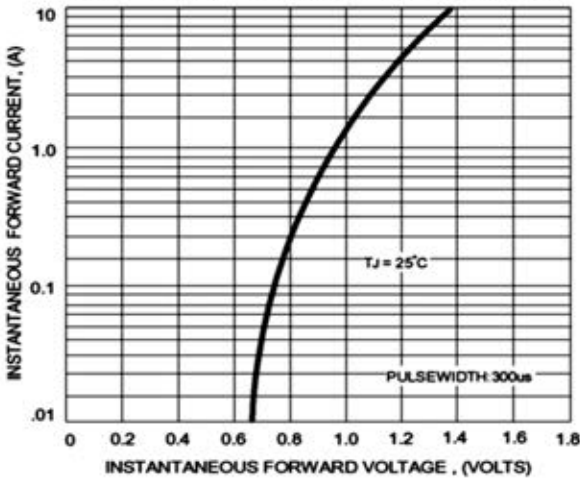


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

