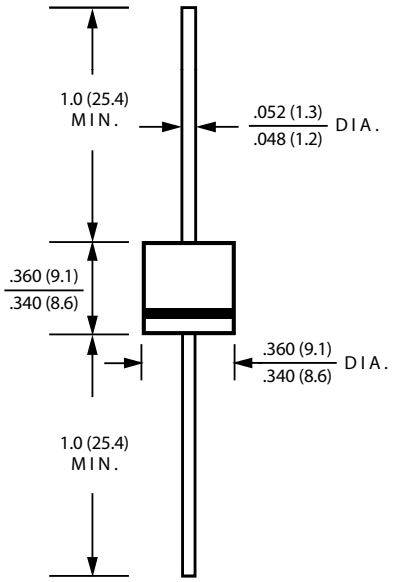
6A05G Thru 6A10G

General Purpose Rectifiers
Glass Passivation Junction



R-6

Dimensions in inches and (millimeters)

Ordering Information	
Part Number	**Remark**
6AxxG	General
6AxxG-H	Halogen Free
6AxxG-Q	Automotive

PRIMARY CHARACTERISTICS	
I_F	6A
V_{RRM}	50~1000V
I_{FSM}	150A
V_F	1.1V
T_J max	150°C

Features

- High current capability
- High surge current capability
- Low reverse current
- Component in accordance to RoHS 2002/95/EC
- AEC-Q101 qualified

Mechanical Date

- Cases: R-6
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead free Plating (Tin Finish) Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 2.047 grams (approximate)

MAXIMUM RATINGS (TA=25°C unless otherwise noted)									
PARAMETER	**SYMBOL**	**6A05G**	**6A1G**	**6A2G**	**6A4G**	**6A6G**	**6A8G**	**6A10G**	**UNIT**
Maximum repetitive peak reverse voltage	V_{RRM}	200	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	140	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	200	100	200	400	600	800	1000	V
Maximum average forward rectified current	I_F	6.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150.0							A
Maximum Instantaneous Forward Voltage IF=6A @ 25°C	V_F	1.1							V
Maximum DC Reverse Current @ Tc=25°C at Rated DC Blocking Voltage @ Tc=100°C	I_R	10 200							uA
Typical Junction Capacitance(NOTE1)	C_j	100							pF
Typical Thermal Resistance	$R_{\theta Ja}$	80							°C/W
Operating Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

NOTES:1.Measured at 1.0MHZ and applied reverse voltage of 4.0V DC

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FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

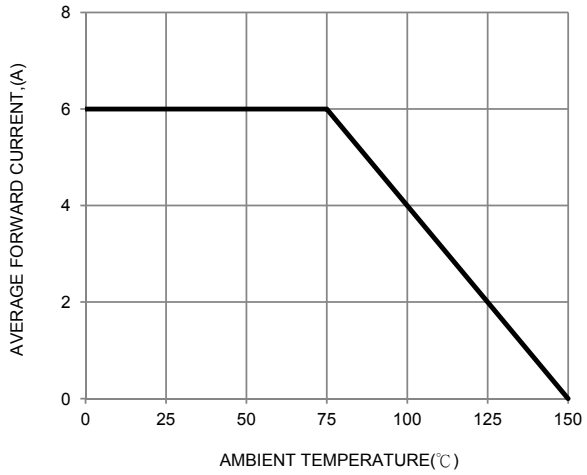

FIG. 2-TYPICAL FORWARD CHARACTERISTICS

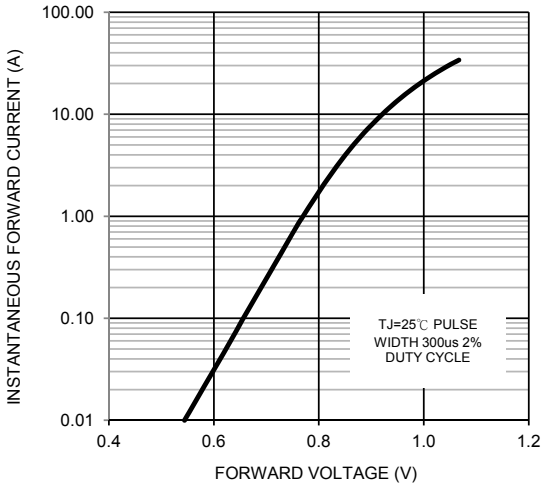

FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

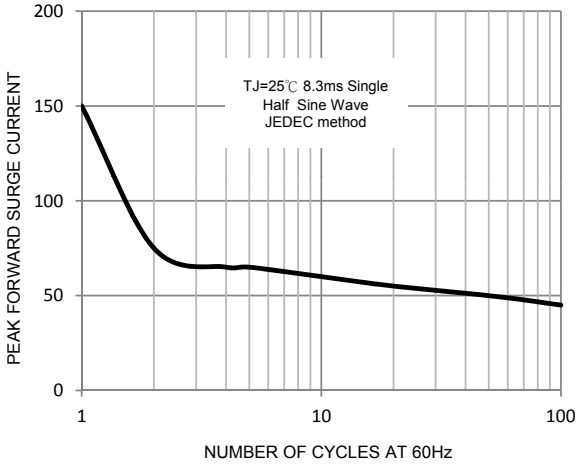

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

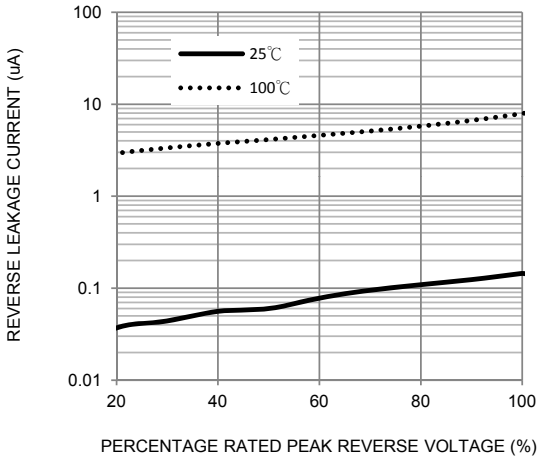

FIG. 5-TYPICAL JUNCTION CAPACITANCE