

FEATURES

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Glass passivated chip junction
- Solder dip 275 °C max. 7 s, per JESD 22-B106

TYPICAL APPLICATIONS

- **Package:** R-6
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes cathode end

MAXIMUM RATINGS (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	6A05G	6A10G	6A20G	6A40G	6A60G	6A80G	6A100G
Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, T _a =75°C	I _{F(AV)}	A	6.0						
Forward Surge Current (Non-repetitive) @1mSec, Square Wave, 1 Cycle, 25°C	I _{FSM}	A	400						
Storage Temperature	T _{stg}	°C	-55 ~+150						
Junction Temperature	T _j	°C	-55~+150						

ELECTRICAL CHARACTERISTICS (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	6A05G	6A10G	6A20G	6A40G	6A60G	6A80G	6A100G
Maximum instantaneous forward voltage drop per diode	V _{FM}	V	I _{FM} =6.0A	1.1						
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM1}	µA	T _a =25°C	2.5						
	I _{RRM2}		T _a =100°C	50						
Typical junction capacitance	C _j	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	50						

THERMAL CHARACTERISTICS (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	6A05G	6A10G	6A20G	6A40G	6A60G	6A80G	6A100G
Thermal Resistance(Typical)	R _{θJ-A}	°C/W	12						

CHARACTERISTICS (TYPICAL)

FIG.1: I_o-T_a Curve

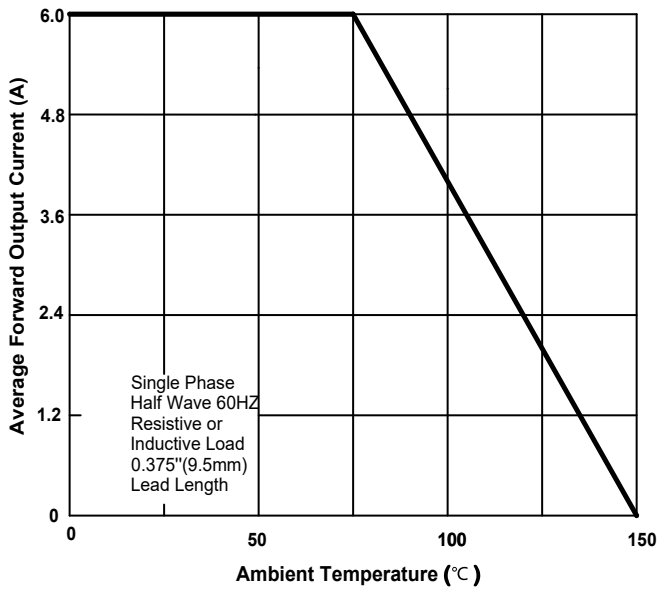


FIG.2: Forward Surge Current Capability

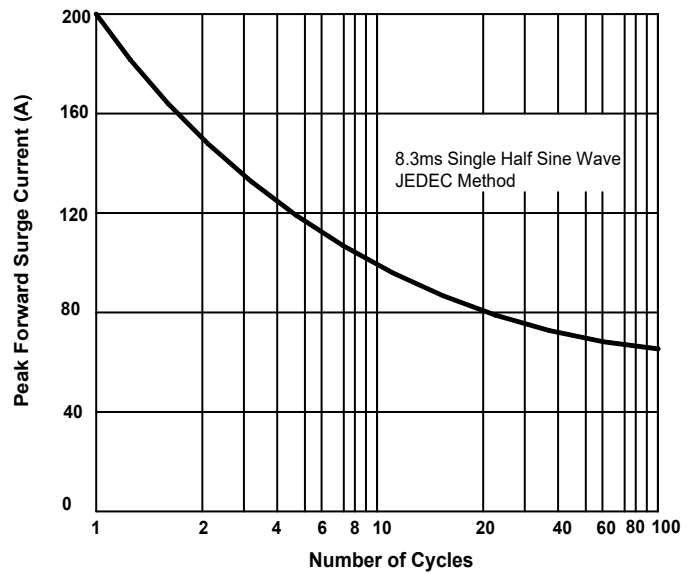


FIG.3: Forward Voltage

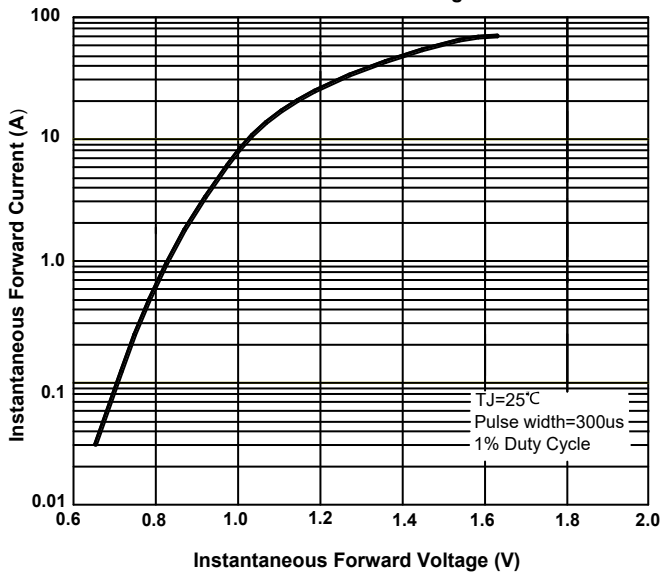
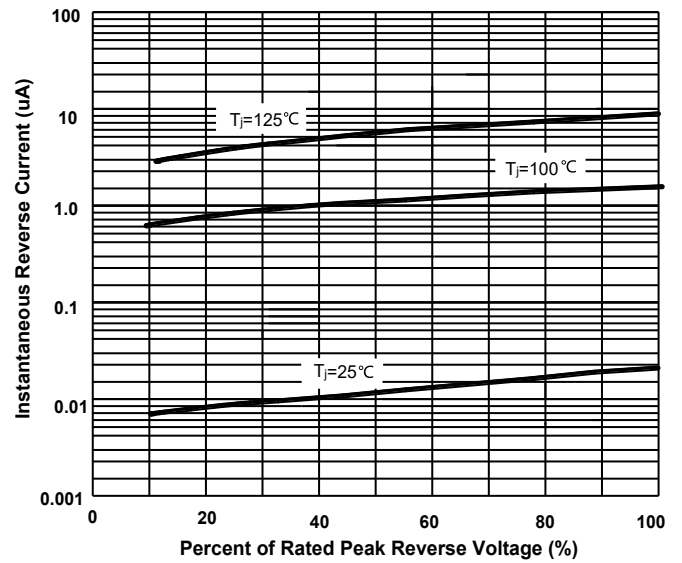
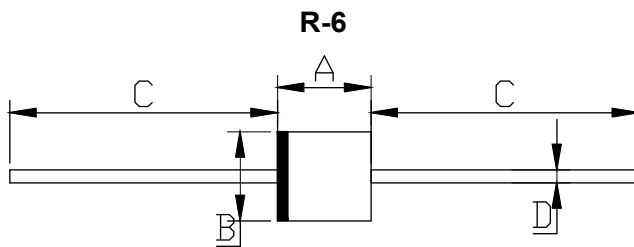


FIG.4: Typical Reverse Characteristics



OUTLINE DIMENSIONS



Dimensions in millimeters

R-6		
Dim	Min	Max
A	8.60	9.10
B	8.60	9.10
C	25.4	/
D	1.20	1.32

*NOTE: Use suffix A for Tape & Box or no suffix for Bulk Pack.