

# 1A1G TURU 1A7G

## General Purpose Rectifier

### Features

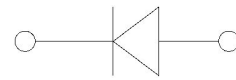
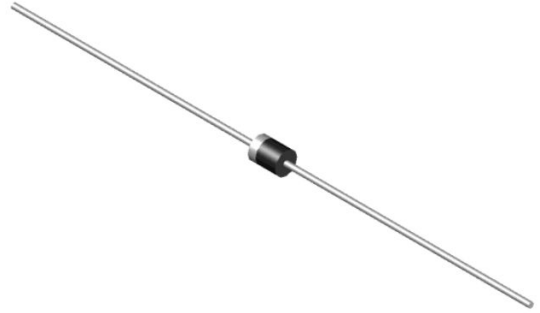
- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Glass passivated chip junction
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### Typical Applications

For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes for consumer, and telecommunication.

### Mechanical Data

- Package:T-1
- 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 (Ta=25°C Unless otherwise specified)

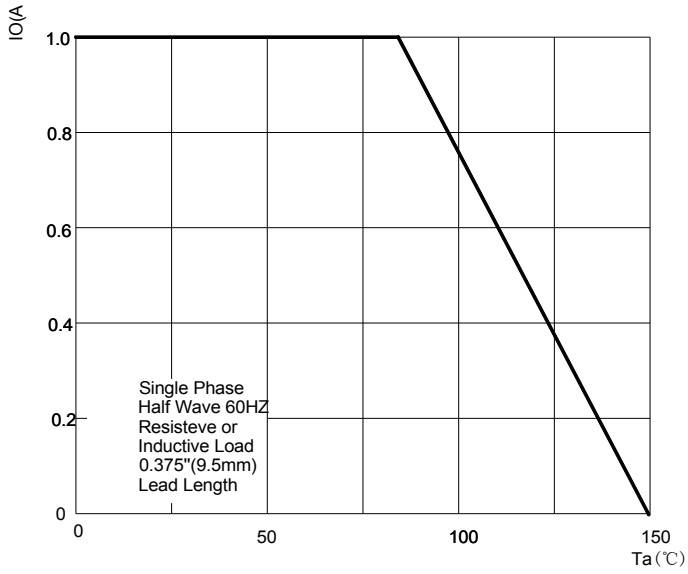
PARAMETER	Symbol	Unit	1A1G	1A2G	1A3G	1A4G	1A5G	1A6G	1A7G
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	$V_{RMS}$	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	$V_{DC}$	V	50	100	200	400	600	800	1000
Average Forward Current @Half-sine wave, Resistance load, Tc(Fig.1)	$I_o$	A	1.0						
Forward Surge Current (Non-repetitive) @60HZ sine wave, 1 cycle, Ta=25°C	$I_{FSM}$	A	30						
Current squared time @1ms≤t8.3≤ms Ta=25°C, Rating of per diode	$I^2t$	A <sup>2</sup> s	3.7						
Thermal Resistance(Typical) @Between junction and case	$R_{\theta J-A}$	°C/W	65						
Storage Temperature	$T_{stg}$	°C	-55 ~ +150						
Junction Temperature	$T_j$	°C	-55 ~ +150						

### ■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

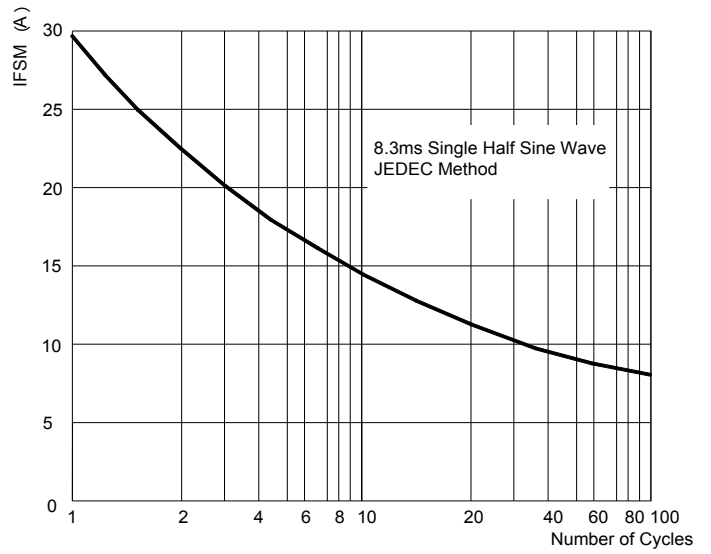
PARAMETER	Symbol	Unit	Conditions	1A1G	1A2G	1A3G	1A4G	1A5G	1A6G	1A7G
Peak Forward Voltage	$V_{FM}$	V	$I_F = 1.0A$	1.1						
Peak Reverse Current	$I_{RRM}$	$\mu A$	$V_R = V_{DC} @ Ta = 25^\circ C$	5						
			$V_R = V_{DC} @ Ta = 125^\circ C$	50						

## ■ Characteristics (Typical)

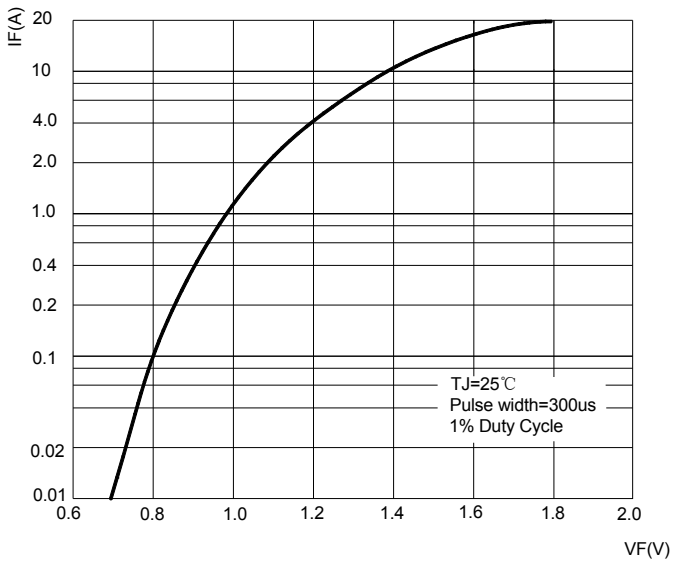
**FIG.1: I<sub>o</sub>-T<sub>a</sub> Curve**



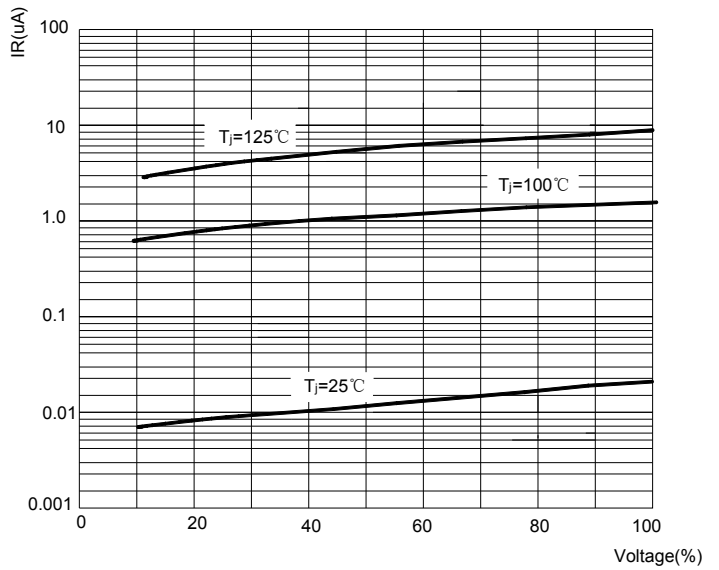
**FIG.2: Forward Surge Current Capability**



**FIG.3: Forward Voltage**



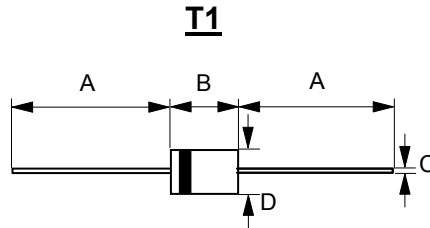
**FIG.4: Typical Reverse Characteristics**



## ■ Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
1A1G THRU 1A7G	T-1	3000	3000	45000	Ammo box

## ■ Outline Dimensions



T1		
DIM.	MIN.	MAX.
A	25.4	--
B	2.60	3.20
C	0.53Ø	0.64Ø
D	2.20Ø	2.60Ø

All dimensions in millimeter

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