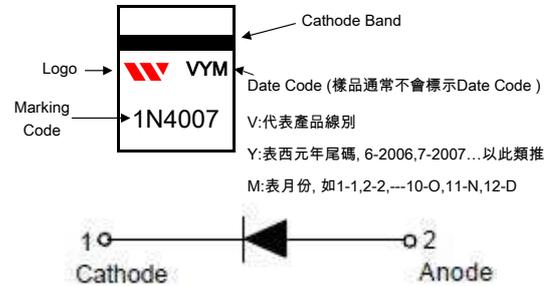


**General Purpose Plastic Rectifier Axial Leaded-1A**
**PRIMARY CHARACTERISTICS**

$V_{RRM}$	50V~1000V
$I_{F(AV)}$	30A
$V_F$	1.1V
$T_{J,Max}$	150°C

**SCHEMATIC DIAGRAM  
DO-41 PACKAGE**

Body Marking


**FEATURES**

- Low forward voltage drop
- Low leakage current
- High forward surge current capability
- High temperature soldering guaranteed : 260°C/40 seconds

**MECHANICAL DATA**

- Case : Molded plastic, DO-41
- Polarity : Color band denotes cathode
- Terminals :Plated terminals, solderable per J-STD-002 and JESD22-B102
- Epoxy : UL94-V0 rated flame retardant

**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 by 20%

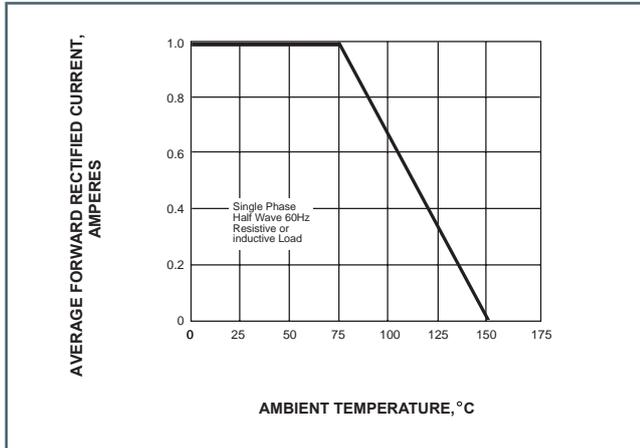
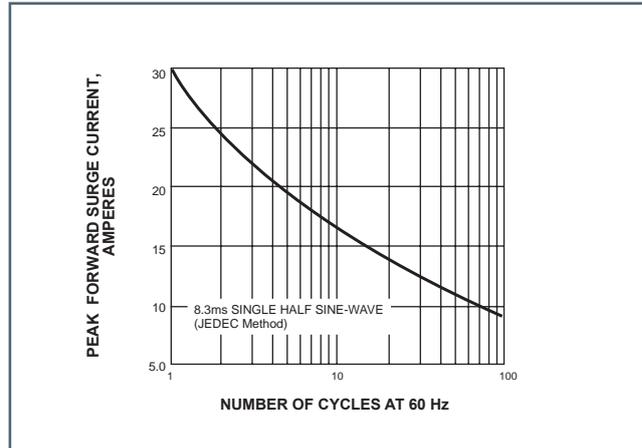
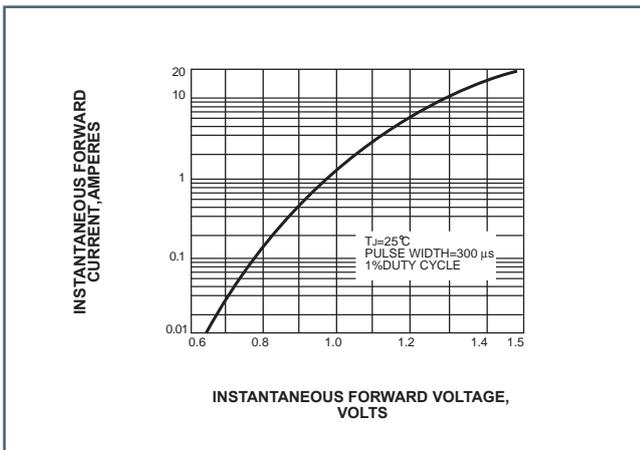
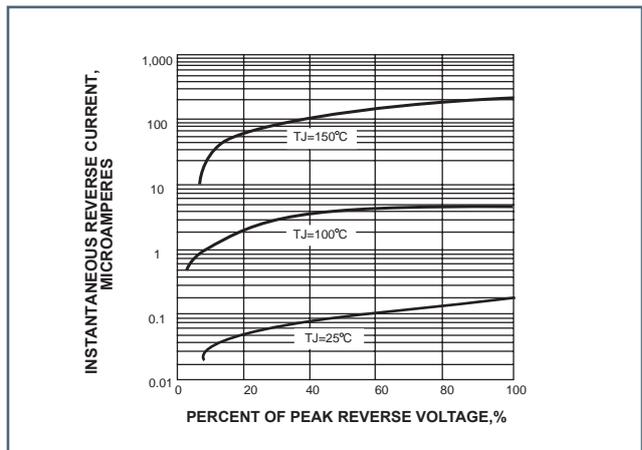
PARAMETER	SYMBOL	1N4001GA	1N4002GA	1N4003GA	1N4004GA	1N4005GA	1N4006GA	1N4007GA	UNIT
	MARKING	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=75^\circ\text{C}$	$I_{(AV)}$	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	30.0							Amps
Maximum instantaneous forward voltage at 1.0A	$V_F$	1.1							Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	$I_R$	5.0 50.0							$\mu\text{A}$
Typical junction capacitance (NOTE 1)	$C_J$	15.0							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	50.0							°C/W
Operating junction and storage temperature range	$T_J, T_{STG}$	-65 to +150							°C

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

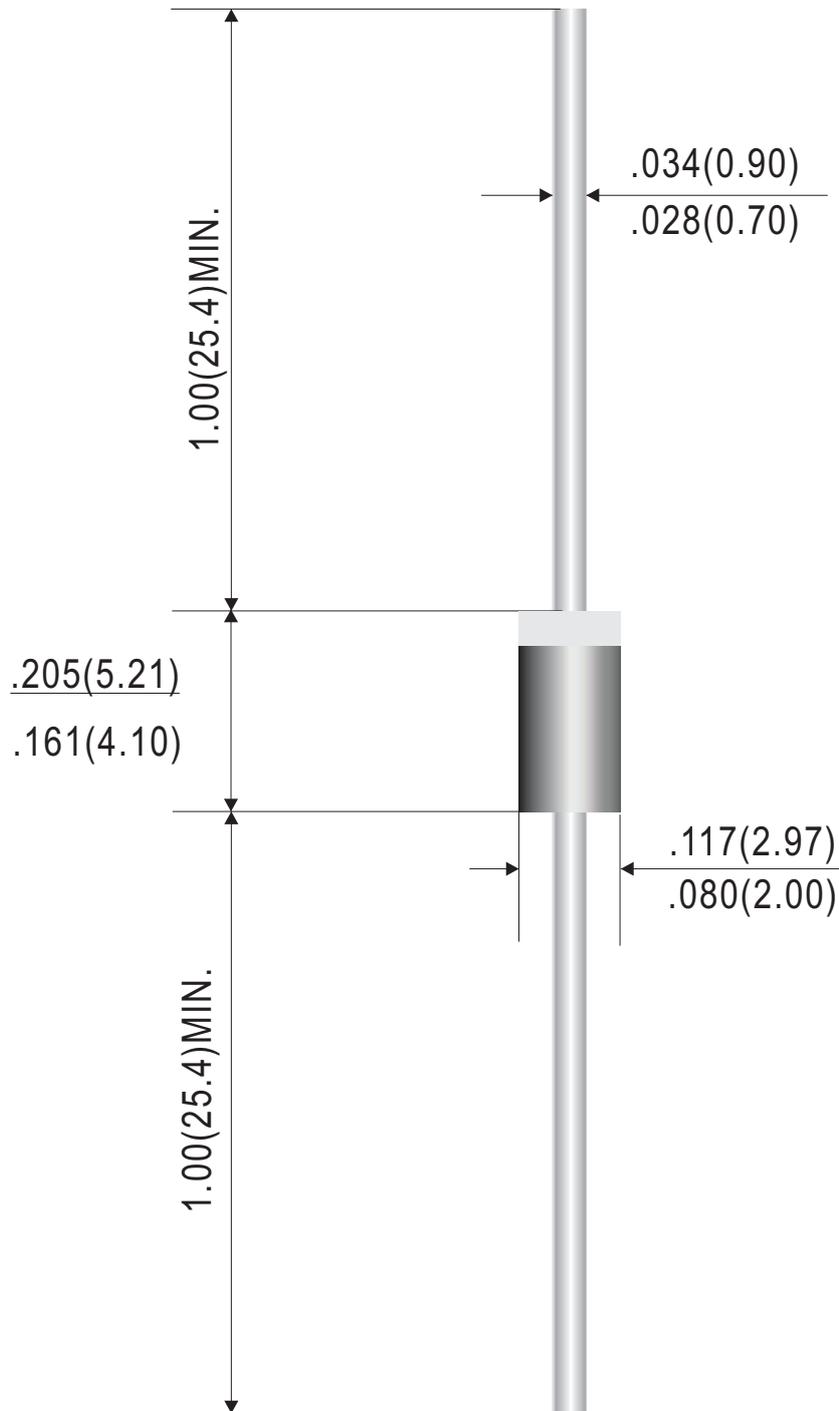
**General Purpose Plastic Rectifier Axial Leaded-1A**
**Ratings and Characteristic Curves**

( $T_A=25^\circ\text{C}$  unless otherwise noted)

**FIG. 1 - FORWARD CURRENT DERATING CURVE**

**FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**

**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**


# Outline Drawing

# DO-41



Dimensions in inches and (millimeters)

Rev.C

**Ordering Information:**

Device PN	Marking <sup>(4)</sup>	Packing
Part Number -F <sup>(1)</sup> G <sup>(2)</sup> -WS <sup>(3)</sup>	Page.1 Table	Ammo Packing:5000pcs/Box

**Note:** (1) "F ":Tape pitch specifications & Ammo Packing

(2) Packing code suffix "G" for RoHS product ; Packing code Suffix"H" for halogen free product  
All materials and products supplied comply with the U.S. Toxic Substances Control Act statement, PBT Chemicals

(3) WS : Willas brand abbreviation, Label Type does not display

(4) There may be additional marking, which relates to the lot trace code information (data code and vendor code), the logo or the environmental category on the device

**\*\*\*Disclaimer\*\*\***

WILLAS reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. WILLAS or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on WILLAS data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. WILLAS does not assume any liability arising out of the application or use of any product or circuit.

This is the preliminary specification. WILLAS products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of WILLAS. Customers using or selling WILLAS components for use in such applications do so at their own risk and shall agree to fully indemnify WILLAS Inc and its subsidiaries harmless against all claims, damages and expenditures.