

1N4001G thru 1N4007G

1.0 AMP Glass Passivated Rectifier

◆ Features

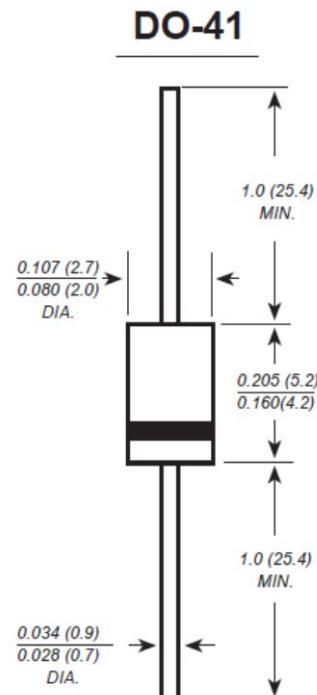
- » Low forward voltage drop
- » High current capability
- » High reliability
- » High surge current capability
- » Glass passivated junction



◆ Mechanical Data

- » **Case:** DO-41 molded plastic body
- » **Terminals:** Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- » **Polarity:** Color band denotes cathode end
- » **Mounting position:** Any
- » **Standard Package:** Ammopack

PRIMARY CHARACTERISTICS	
I _{F(AV)}	1.0 A
V _{RRM}	50 V to 1000 V



◆ Electrical Characteristic

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

PARAMETER	SYMBOL	1N 4001	1N 4002	1N 4003	1N 4004	1N 4005	1N 4006	1N 4007	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 0.375"(9.5mm) lead length at T _A =55°C	I _(AV)						1.0		Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}						30.0		Amps
Maximum instantaneous forward voltage at 1.0A	V _F					1.1			Volts
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R				5.0	50.0			uA
Typical junction capacitance (NOTE 1)	C _J				15.0				pF
Typical thermal resistance (NOTE 2)	R _{qJA}				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

◆ Rating And Characteristic Curves

FIG.1-TYPICAL FORWARD

CHARACTERISTICS

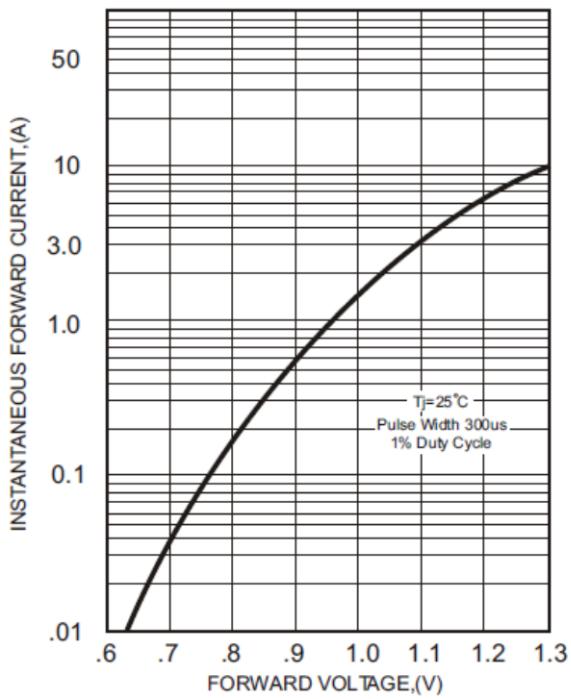


FIG.3 - TYPICAL REVERSE

CHARACTERISTICS

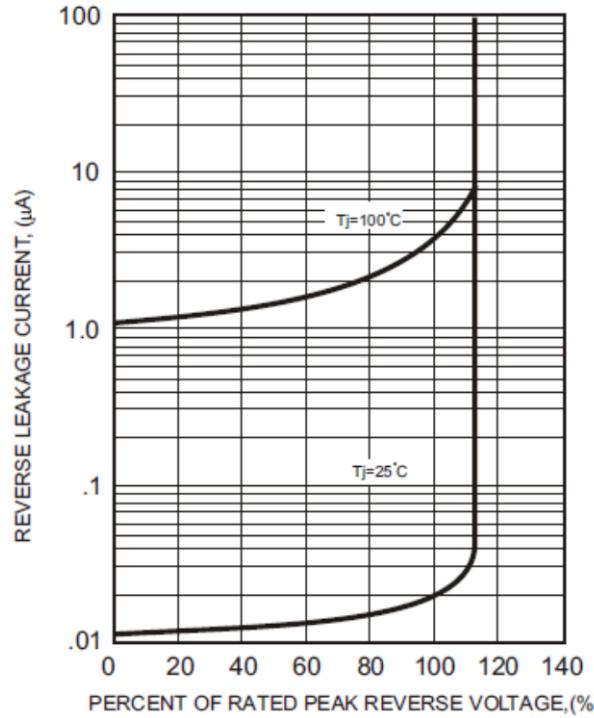


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

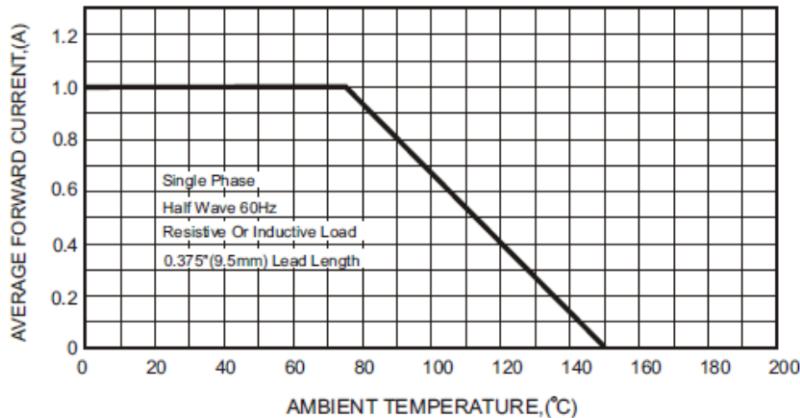


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

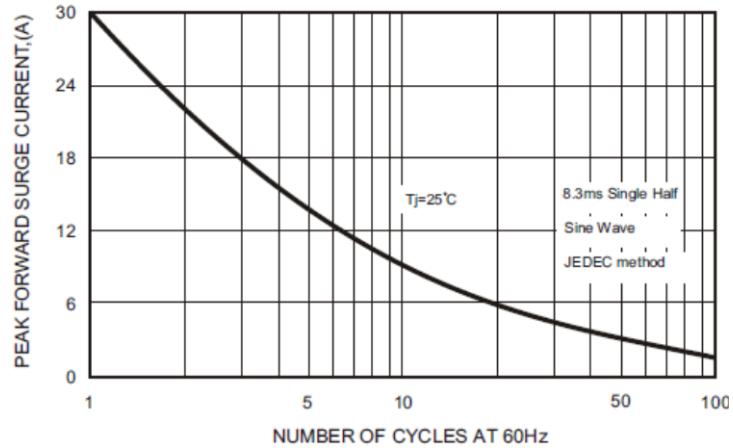


FIG.5-TYPICAL JUNCTION CAPACITANCE

