



Compliance

RoHS

1N4001 to 1N4007

Surface Mounted Bridge Rectifier

FEATURE

High current capability,
 Low forward voltage drop
 Low power loss, high efficiency
 High surge capability
 High temperature soldering guaranteed
 260°C / 1 0sec/0.375" lead length at 5 lbs tension

MECHANICAL DATA

Terminal: Plated axial leads solder able per
 MIL-STD 202E, method 208C
 Case: Molded with UL-94 Class V-0 recognized
 Flame Retardant Epoxy
 Polarity: color band denotes cathode
 Mounting position: any

Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	Units
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward output rectifier current	I _{F(AV)}	1.0							A
Peak forward surge current single half sine-wave superimposed on rated load	I _{FSM}	30.0							A
Storage Temperature	T _{STG}	-55 to 150							°C
Operating Junction Temperature Range	T _J	-55 to 150							°C

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Condition	Symbol	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	Units
Maximum instantaneous forward voltage	I _F =1.0A	V _F	1.0							V
Maximum DC reverse current at blocking voltage	T _A =25°C	I _R	50							µA
	T _A =125°C		100							
Reverse Recovery Time	See note 1	T _{rr}								ns
Typical junction capacitance(Note 1)		C _J	15							pF

Thermal Characteristic (T_A=25°C unless otherwise noted)

Parameter	Symbol	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	Units
Typical Thermal resistance(Note 2)	R _{θJA}	75							°C/W

Note

1. Measured at 1MHz and applied reverse voltage of 4.0 volts dc.
2. Measured on P.C.Board with 0.2×0.2"(5.0×5.0mm) Copper Pad Areas



1N4001 thru 1N4007

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

FIG.1 – TYPICAL FORWARD CHARACTERISTIC

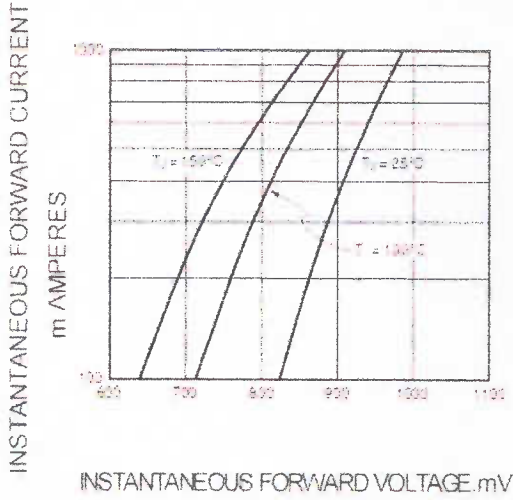


FIG.2 – TYPICAL JUNCTION CAPACITANCE

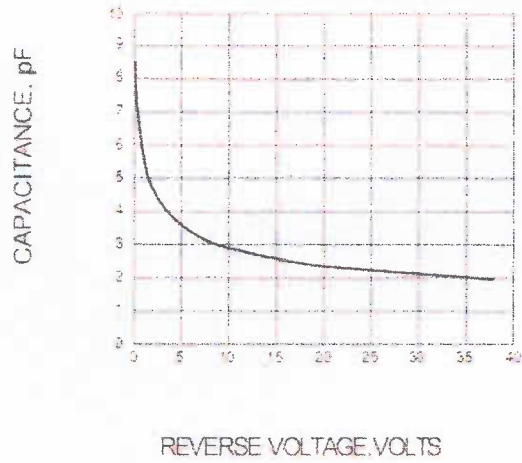


FIG.3 – TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS

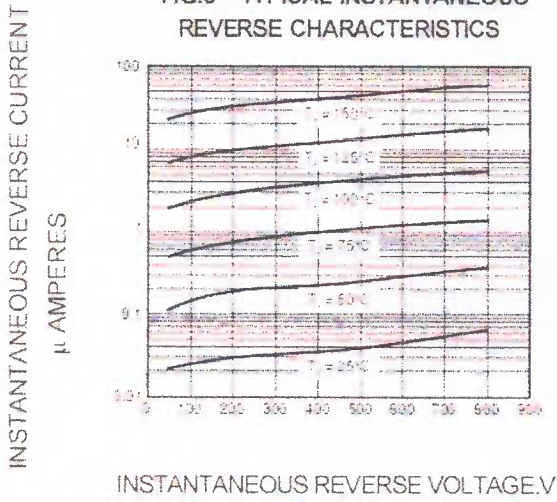
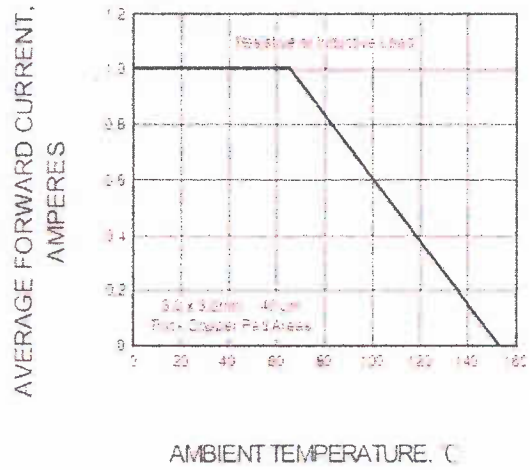


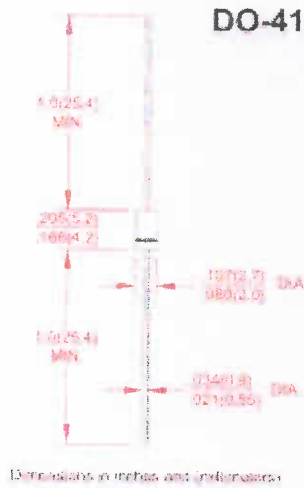
FIG.4 – FORWARD DERATING CURVE





1N4001 to 1N4007

Package Information



Product Chip Information

Product Number	1N4001 • 1N4007
Chip Technology	OJ Process

Ordering Information

Part No.	UNIT WEIGHT(Kg/K)	Quantity	PACKING
1N4001~1N4007	0.2453	1000 or 5000	B/P or T/P

NOTE:

- 1) According to the existing RoHS requirement, Lead found in GPP Dice and Lead in high melting Temperature type solders are specifically exempted.
- 2) After authority chop & sign, there should not be any additional changes, cancellation or correction.
- 3) Please sign & return the attached copy for us as acknowledgement of the above information.