



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**1N4001
THRU
1N4007**

TECHNICAL SPECIFICATIONS OF SILICON RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts CURRENT - 1.0 Ampere

FEATURES

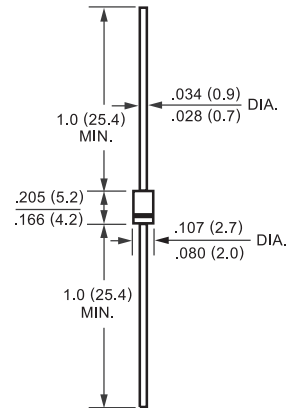
- * Low cost
- * Low leakage
- * Low forward voltage drop
- * High current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.33 gram



DO-41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA = 75°C	Io	1.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30							Amps
Maximum Instantaneous Forward Voltage at 1.0A DC	VF	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	@ TA = 25°C							uAmps
		@ TA = 100°C							
Maximum Full Load Reverse Current Average, Full Cycle .375*(9.5mm) lead length at TL = 75°C		30							uAmps
Typical Junction Capacitance (Note)	CJ	15							pF
Typical Thermal Resistance	RθJA	50							°C/W
Operating and Storage Temperature Range	TJ, Tstg	-65 to + 175							°C

NOTES : Measured at 1 MHz and applied reverse voltage of 4.0 volts

RATING AND CHARACTERISTIC CURVES (1N4001 THRU 1N4007)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

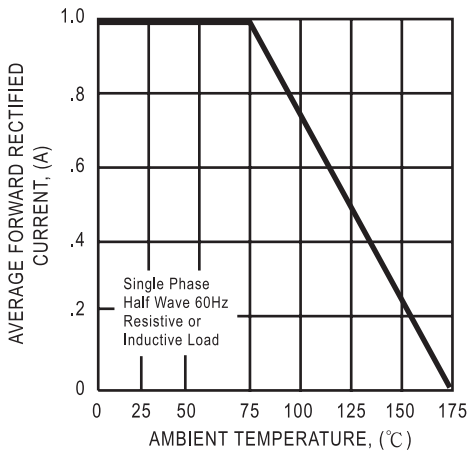


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

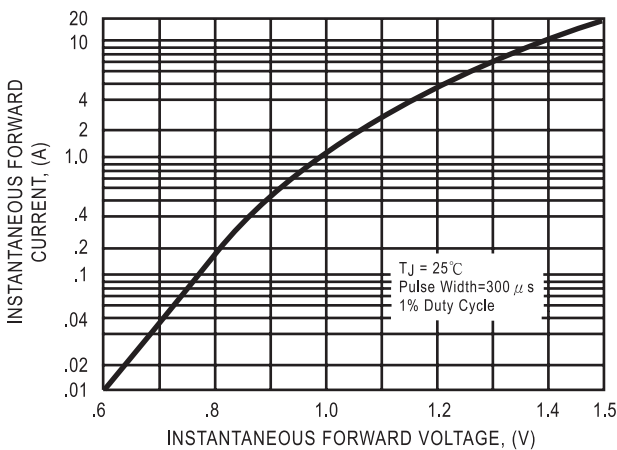


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

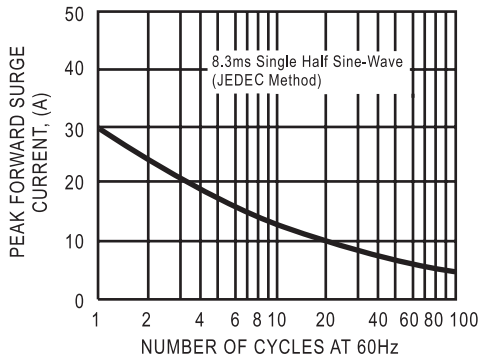


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

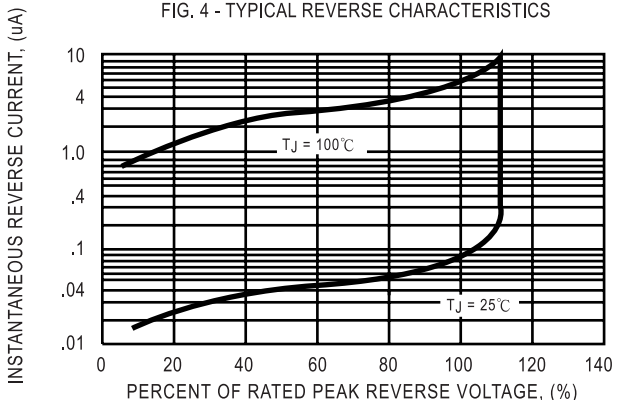
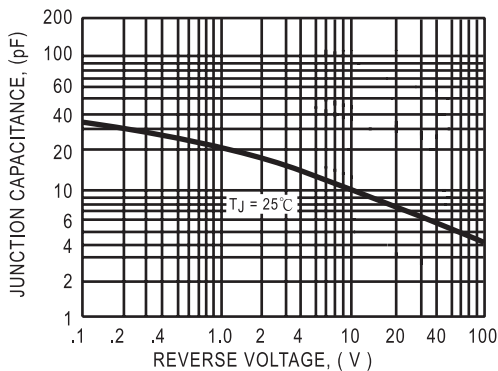


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



DC COMPONENTS CO., LTD.



DC COMPONENTS CO., LTD.

® 道全股份有限公司

No. 8, Lane 427, Shui Yuan Road,
Feng Yuan, Taichung, Taiwan, R.O.C.

TEL: 886-4-2529 0371

FAX: 886-4-2529 0400 • 2520 5612

E-MAIL: dccomp@ms38.hinet.net

Certificate of Compliance

Company name: DC Components Co., Ltd.

Company Address: No. 8, Lane 427, Shui Yuan Road, Feng Yuan, Taichung, Taiwan.

Tel: 886-4-25290371

Fax: 886-4-25290400

To: DC customer(s)

DC certifies that our components are manufactured are in compliance with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronics equipment (RoHS Directive) with the exemption of "lead in glass of cathode ray tubes, electronic components and fluorescent tubes." per ANNEX item 5 (quoted from Directive 2002/95/EC), and "lead in high melting temperature type solder" per ANNEX 7 & 1 (quoted from both ANNEX of Directive 2002/95/EC and Directive 2005/747/EC) on parts with internal die bond solder. The components are deemed as compliant according to the definition given in the directives (refer to Directive 2002/95/EC and 2005/747/EC, including the ANNEX)

Authorized signatory

Rachel Wong
(Director of QC)
DC Components Co. Ltd.
Date :2006-JAN-02



DC COMPONENTS CO., LTD.

RECTIFIER

TYPE 1N4007 CODE 08504193

HK

Q'TY 1000EA Q A ACCEPTED



44042855