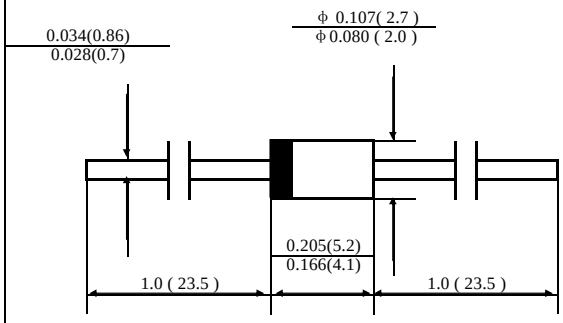
WXDH ELECTRONICS

1N4001 THRU 1N4007

1.0AMP PLASTIC SILICON RECTIFIERS

VOLTAGE RANGE: 50 TO 1200 VOLTS

DO-41



inch (mm)

FEATURES

. Diffused junction
. Low Leakage
. Low forward voltage drop
. High current capability
. Easily cleaned with Freon. Alcohol. Lsopropanol and similar solvents
. The plastic material carries U/L recognition 94V-O

MECHANICAL DATA

. Case: JEDEC DO-41. molded plastic
. Terminals: Axial leads. Solderable per MIL - STD - 202. Method 208
. Polarity: Color band denotes cathode
. Weight: 0.012 ounce. 0.33grams
. Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	1N4007*	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	1200	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	840	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	1200	V
Maximum Average Forward Rectified Current 9.5mm Lead Length. T_A = 50℃	$I_{(AV)}$	1.0								A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated T_A = 50℃	I_{FSM}	30								A
Maximum Forward Voltage at 1.0A DC	V_F	**1.0**								V
Maximum Reverse Current T_A = 25℃ at Rated DC Blocking Voltage T_A = 100℃	I_R	**5.0** **50.0**								μA
Typical Junction Capacitance (Note 1)	C_j	**15**								pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	**50** **25**								℃/W
Operating Junction Temperature Range	T_j	−55 to 125								℃
Storage Temperature Range	T_{STG}	−55 to 150								℃

NOTE: 1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC.
2. Thermal resistance junction to ambient.

FIG. 1 -- TYPICAL FORWARD CHARACTERISTIC

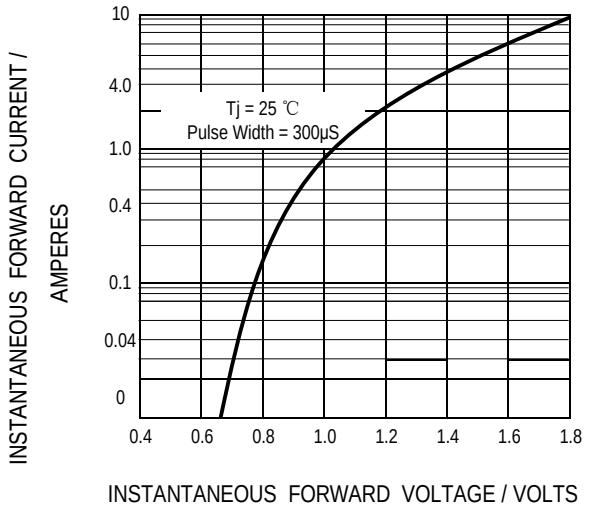


FIG. 2 -- TYPICAL JUNCTION CAPACITANCE

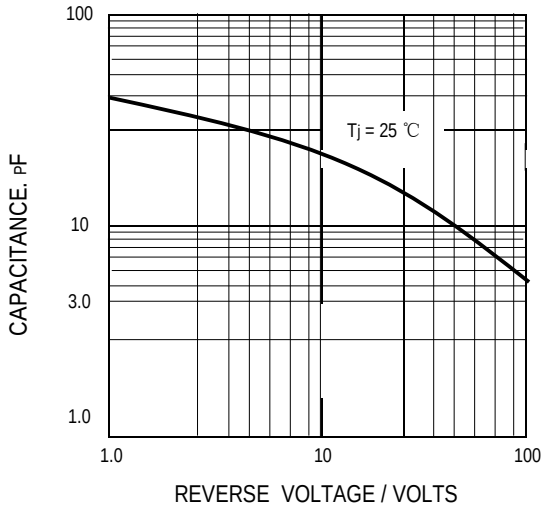


FIG. 3 -- FORWARD CURRENT DERATING CURVE

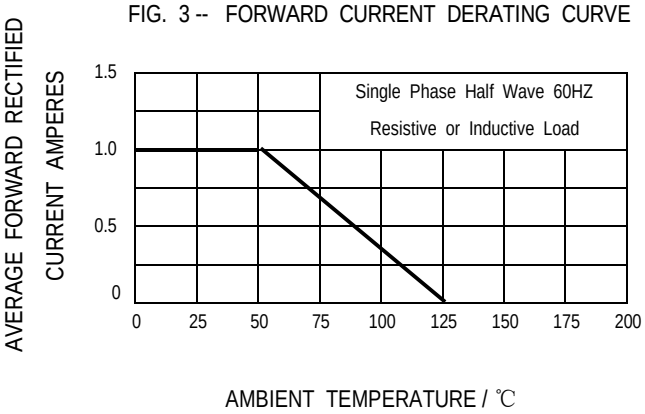


FIG. 4 -- PEAK FORWARD SURGE CURRENT

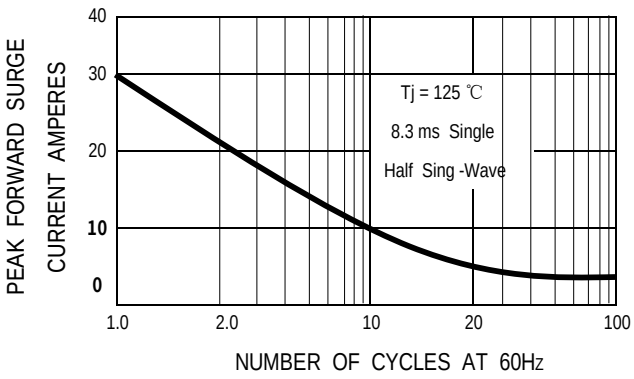


Fig.5-Typical transient thermal impedance

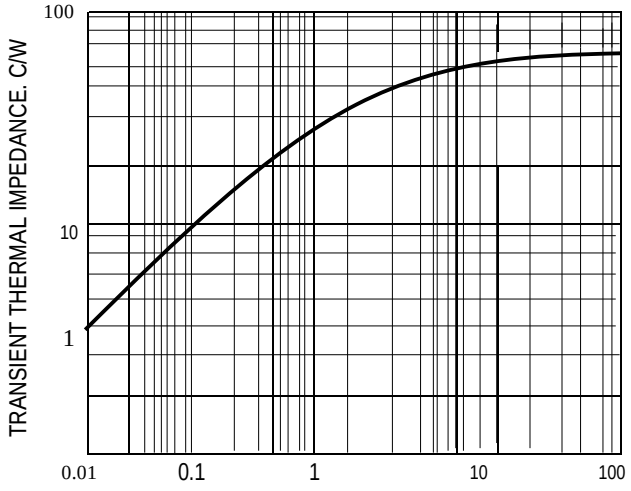


Fig.6-TYPICAL REVERSE CHARACTERISTICS