



T-03-19

TECHNICAL DATA SHEET
DATASHEET 101 REVISION B

TO-254 STYLE 30 AMP 200/300 VOLT 35 NANOSECOND DUAL HERMETIC RECTIFIERS

FEATURES

The SHD3001P/SHD3002P series devices feature an isolated case design for ease of mounting. The devices are constructed with hermetic surface mount devices internally for high reliability under military environmental conditions. No magnetic materials are used in the package resulting in superior high frequency performance.

MAXIMUM RATINGS

(All ratings at $T_A = 25^\circ\text{C}$ unless otherwise specified.)

RATING	SYMBOL	SHD3001P	SHD3002P	UNIT
PEAK INVERSE VOLTAGE	PIV	200	300	VOLTS
AVERAGE DC OUTPUT CURRENT Tc = 55°C Tc = 100°C	I _o	30 25	30 25	AMPS
PEAK SINGLE CYCLE SURGE CURRENT PER LEG, Tp = 8.3 ms SINGLE HALF SINE, SUPERIMPOSED ON RATED LOAD	I _{FSM}	300	300	AMPS
MAXIMUM OPERATING JUNCTION TEMPERATURE	T _j	175	175	°C
STORAGE TEMPERATURE RANGE	T _{STG}	-55 to +150	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

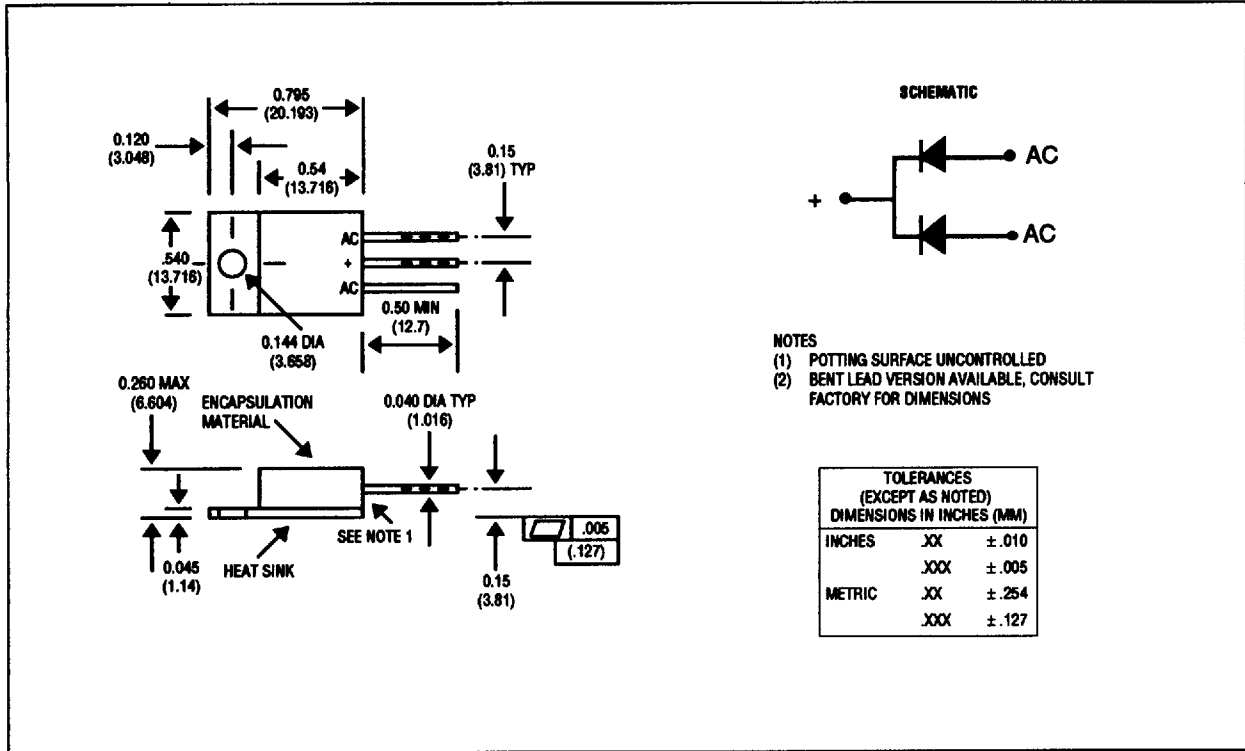
(All ratings at $T_A = 25^\circ\text{C}$ unless otherwise specified.)

MAXIMUM FORWARD VOLTAGE (PER LEG) [1] Ta = 25°C, If = 30A Ta = 100°C, If = 30A	V _f	1.1 1.0	1.1 1.0	VOLTS
MAXIMUM INSTANTANEOUS REVERSE CURRENT AT RATED PIV (PER LEG) [1] Ta = 25°C Ta = 100°C	I _r	25 500	50 1000	μ AMPS
MAXIMUM REVERSE RECOVERY TIME If = 0.5A, I _r = 1.0A, I _{rr} = 0.25A	T _{rr}	35	35	ns
MAXIMUM THERMAL RESISTANCE JUNCTION TO CASE (PER DIODE)	θ _{j-c}	1.5	1.5	°C/W

[1] Pulse Test: Tp = 300 μ sec, Duty cycle ≤ 2%

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MECHANICAL DIMENSIONS



CHARACTERISTIC CURVES

