TECHNICAL DATA
DATA SHEET 599, REV. A
Formerly part number –SHD52622

FIXED POSITIVE 5.0 VOLT REGULATOR

FEATURES:

- **FIXED VOLTAGE REGULATOR IN A TO-257 PACKAGE**
- **SIMILAR to INDUSTRY TYPE 7805A**

MAXIMUM RATINGS

All ratings are at T_A = 25°C unless otherwise specified.

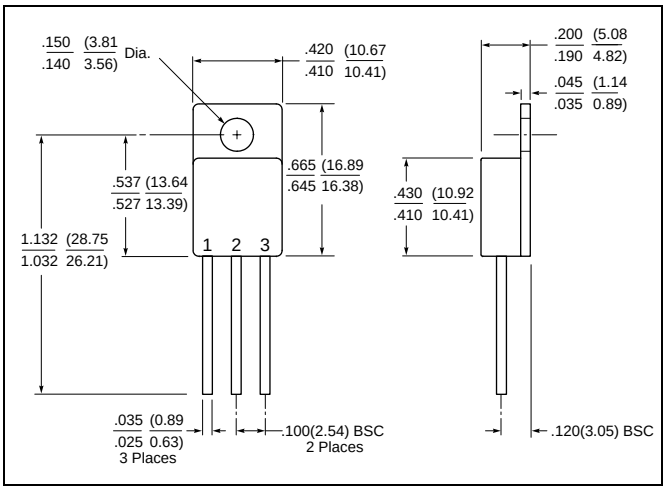
Parameter	Conditions		Maximum	Units
Input Voltage	-	-	35	Vdc
Ambient Operating Temperature Range (T_A)	-	-	-55 to +150	°C
Storage Temperature Range	-	-	-65 to +150	°C
Thermal Resistance ($R\theta_{JC}$)	-	-	6.3	°C/W
Rated Power	T_C = +25°C	-	20	W

ELECTRICAL CHARACTERISTICS

Parameter	Conditions	Minimum	Maximum	Units
Output Voltage (V_{OUT})	T_A = 25°C	4.95	5.05	V
	V_{IN} = 7.5V to 20V -55°C ≤ T_A ≤ +125°C	4.85	5.15	V
Line Regulation (V_{RLINE})	V_{IN} = 7.5V to 20V -55°C ≤ T_A ≤ +125°C	-	5.0 12	mV
	V_{IN} = 8.0V to 12V -55°C ≤ T_A ≤ +125°C	-	4.0 10	mV
Load Regulation (V_{RLOAD})	I_O = 5.0 mA to 1.0 A -55°C ≤ T_A ≤ +125°C	-	12 25	mV
	I_O = 250 mA to 750 mA -55°C ≤ T_A ≤ +125°C	-	6.0 15	mV
Standby Current Drain (I_{SCD})	-	-	6.0 6.5	mA
Standby Current Drain Change With Line (ΔI_{SCD}) (Line)	V_{IN} = 7.5V to 20V	-	0.8	mA
Standby Current Drain Change With Load (ΔI_{SCD}) (Load)	I_O = 5.0 mA to 1000mA	-	0.5	mA
Dropout Voltage V_{DO}	ΔV_{OUT} = 100Mv, I_O = 1.0A	-	2.5	V
Short Circuit Current I_{DS}	V_{IN} = 35V, Maximum assured short circuit protection -55 to +150	-	1.2 2.8	A
Ripple Rejection $\frac{\Delta V_{IN}}{\Delta V_{OUT}}$	f = 120 Hz, ΔV_{IN} = 10V	66	-	dB
	If not tested, shall be guaranteed to the spec limits -55 to +125	60	-	dB
Output Noise Voltage N_O If not tested, shall be guaranteed to the spec limits	T_A = 25°C, f = 10Hz to 100kHz	-	40	µV/V RMS
Long Term Stability $\frac{\Delta V_{OUT}}{\Delta t}$ If not tested, shall be guaranteed to the spec limits	T_A = 25°C, t = 1000 hrs.	-	75	mV

Note: Output Voltage tolerance; +/- 1% @ 25° C, +/- 2% from -55° to +80° C

MECHANICAL DIMENSIONS: In Inches / mm



TO-257

PINOUTS

DEVICE TYPE	PIN 1	PIN 2	PIN 3
VOLTAGE REGULATOR TO-257 PACKAGE	INPUT	GROUND	OUTPUT