TECHNICAL DATA
DATA SHEET 178, REV. A
Formerly part number SHD52625

FIXED NEGATIVE 12.0 VOLT 1.5 AMP REGULATOR

FEATURES:

- **ISOLATED HERMETIC PACKAGE**
- **SIMILAR to INDUSTRY TYPE LM7912A**

MAXIMUM RATINGS

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

Parameter	Conditions	Typical	Limit	Units
Input Voltage	-	-	-35	Vdc
Storage Temperature Range	-	-	-65 to +150	°C
Lead Temperature	Soldering, 10 seconds	-	+300	°C
Power Dissipation (P_D)	T_C = +25°C T_A = +25°C	- -	15 3.0	W W
Maximum Thermal Resistance Junction to Case (θ_{JC})	-	-	4.2	°C/W
Maximum Thermal Resistance Junction to Ambient (θ_{JA})	-	-	42	°C/W
Maximum Junction Temperature (T_J)	I_O = 5.0 mA to 1.0 A	-	150	°C
Ambient Operating Temperature Range (T_A)	-	-	-55 to +125	°C
Input Voltage Range Recommended	-	-	-14.5 to -27	Vdc

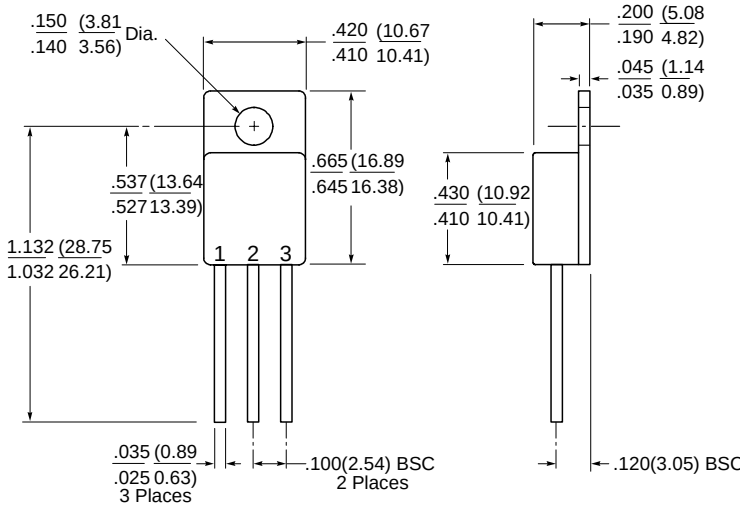
ELECTRICAL CHARACTERISTICS

Parameter	Conditions	Typical	Limit	Units
Output Voltage (V_{OUT})	T_A = +25°C	-12.00	-11.88 -12.12	V V
Line Regulation (V_{RLINE})	-55°C ≤ T_J ≤ +125°C V_{IN} = -14.5V to -27V	-	20	mV
Load Regulation (V_{RLOAD})	-55°C ≤ T_J ≤ +125°C I_O = 5.0 mA to 1.5 A	-	32	mV
Standby Current Drain (I_{SCD})	-	-	3.5	mA
Standby Current Drain Change w/Line (ΔI_{SCD}) (Line)	V_{IN} = -14.5 V to -27 V	-	0.8	mA
Standby Current Drain Change w/Load (ΔI_{SCD}) (Load)	I_O = 5.0 mA to 1000 mA	-	0.5	mA
Dropout Voltage (V_{DO})	I_O = 1.0A	-	1.8	V
Peak Output Current ($I_{O(pk)}$)	T_A = +25°C	-	3.3	A
Short Circuit Current (I_{OS})	V_{IN} = -35V	-	1.2	A
Ripple Rejection (ΔV_{IN} / ΔV_{OUT})	f_O = 120 kHz, V_{IN} = 10V I_O = 5.0mA	56	-	dB
Output Noise Voltage (N_O)	T_A = +25°C 10 Hz - 100kHz	-	40	μV_{rms}
Long Term Stability (ΔV_{OUT} / Δt)	T_A = 25°C, t = 1,000	-	120	mV

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

MECHANICAL DIMENSIONS

TO-257



PINOUT TABLE

TYPE	PIN 1	PIN 2	PIN 3
TO - 257, -12V Regulator	GROUND	V_{IN}	V_{OUT}