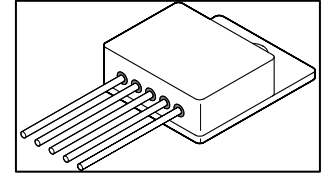## SENSITRON
SEMICONDUCTOR

SHD501355
SHD501355A

TECHNICAL DATA
DATA SHEET 4054, REV. -

LOW DROP OUT POSITIVE ADJUSTABLE VOLTAGE REGULATOR

DESCRIPTION: 3A, VERY LOW DROPOUT ADJUSTABLE POSITIVE REGULATOR

FEATURES:
- LOW DROPOUT, 340mV at 3A Output Current
- FAST RESPONSE
- REMOTE SENSE OPTION (-A)
- REMOTE SHUTDOWN
- ELECTRICALLY EQUIVALENT TO LT1764A
- FIVE TERMINAL MO-078 HERMETIC PACKAGE

ABSOLUTE MAXIMUM RATINGS

PARAMETER	MIN	TYP	MAX	UNIT
INPUT VOLTAGE V_{IN}, V_{OUT}, SD	-	-	20	V
INPUT VOLTAGE V_{SENSE}	-	-	7	V
INPUT – OUTPUT DIFFERENTIAL VOLTAGE	-	-	20	V
POWER DISSIPATION Tc = 25 ^{0}C	-	-	20	W
THERMAL RESISTANCE Rth (j-c)	-	-	6.5	^{0}C / W
STORAGE TEMPERATURE RANGE	-65	-	150	^{0}C
OPERATING JUNCTION TEMPERATURE RANGE CONTROL SECTION POWER TRANSISTOR SECTION	-40 -40	-	125 150	^{0}C

SENSITRON

TECHNICAL DATA
DATA SHEET 4054, REV. -

ELECTRICAL CHARACTERISTICS (AT T_C=25^{0}C, V_{SENSE} NOT CONECTED UNLESS OTHERWISE SPECIFIED)

PARAMETER	MIN	TYP	MAX	UNIT
OUTPUT VOLTAGE V_{IN} =3.3V, I_O = 3A Tc = 25 ^{0}C	2.462	2.500	2.538	V
Tc = -55 ^{0}C to 125 ^{0}C	2.412	2.500	2.575	V
LINE REGULATION V_{IN} =3V to 20V, I_O = 1 mA Tc = -55 ^{0}C to 125 ^{0}C	-	4	10	mV
LOAD REGULATION V_{IN} =3.5V, I_O = 1 mA to 3A Tc = 25 ^{0}C	-	4	10	mV
Tc = -55 ^{0}C to 125 ^{0}C	-	-	30	mV
DROP OUT VOLTAGE I_O = 3 A Tc = 25 ^{0}C Tc = -55 ^{0}C to 125 ^{0}C	-	0.34	0.45	V
	-	-	0.66	V
CURRENT LIMIT V_{IN} =3.5V, V_{OUT} DROP = 0.1V, Tc = -55 ^{0}C to 125 ^{0}C	3.1	-	-	A
RIPPLE REJECTION V_{IN} =4V, I_O = 1.5 A, f = 120 Hz, V_{RIPPLE} = 0.5 V_{P-P}	55	63	-	dB
SHUTDOWN PIN CURRENT V_{SHDN} = 0 V	-	0.01	1	μA
V_{SHDN} = 20 V	-	7	30	μA
SHUTDOWN PIN THRESHOLD V_{OUT} = OFF to ON	-	0.9	2	V
V_{OUT} = ON to OFF	0.25	0.75	-	V
OUTPUT VOLTAGE NOISE C_{OUT} = 10 μF, I_O = 3 A, BW = 10 Hz to 100 KHz	-	40	-	$μV_{RMS}$

SENSITRON

TECHNICAL DATA
DATA SHEET 4054, REV. -

MECHANICAL DIMENSIONS: In inches / mm

.695 (17.65
.685 17.40)

.165 (4.19
.155 3.94)

.270 (6.86
.240 6.10)

.045 (1.14
.035 .89)

.835 (21.21
.815 20.70)

.707 (17.96
.697 17.70)

.550 (13.97
.530 13.46)

1 2 3 4 5

.045(1.14) R

.750 (19.05
.500 12.70)

.035 (.89
.025 .64)

.100 (2.54)
Typ

.140 (3.56)
Typ
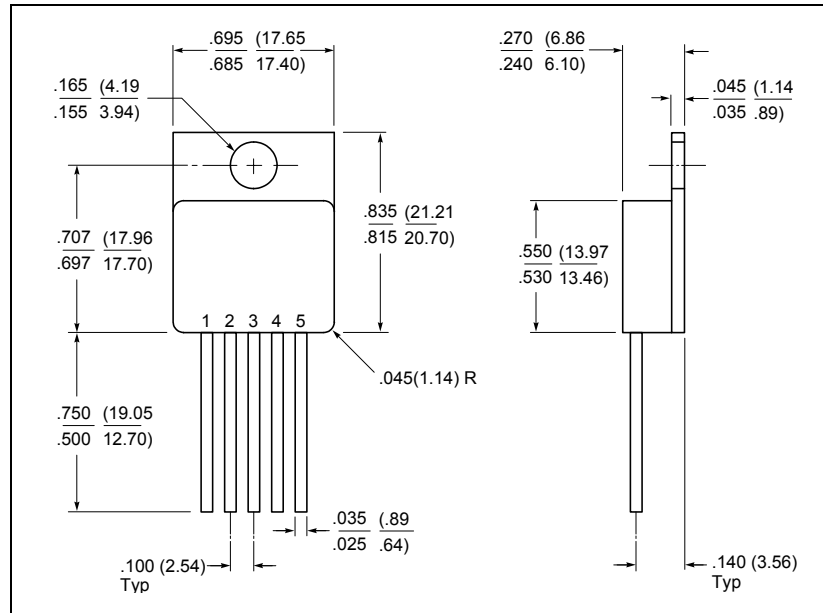
MO-078

PIN CONFIGURATION

PART	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5
SHD501355	V_{IN}	GND	V_{OUT}	SHUTDOWN	NO CONNECTION
SHD501355A	V_{IN}	GND	V_{OUT}	SHUTDOWN	REMOTE SENSE