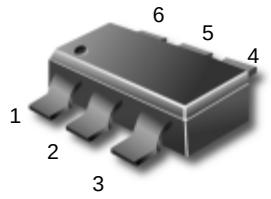
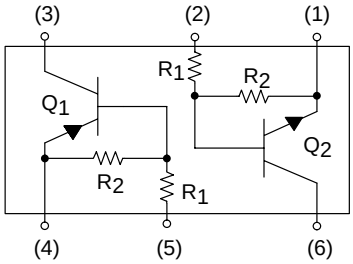
POWER MANAGEMENT

dual digital transistors

LUMD12NDW1T1



SC–88/SOT–363



MAXIMUM RATINGS (T_A = 25°C)

Rating	Symbol	Limits	Unit
Supply Voltage	V_{CC}	50	V
Input Voltage	V_{IN}	40 -10	V
Output Current	I_C	100	mA
	I_O	30	mA
Power Dissipation	P_d	150(TOTAL)	mW*1
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55~+150	°C

*1 120mW per element must not be exceeded.

DEVICE MARKING

LUMD12NDW1T1=13

ELECTRICAL CHARACTERISTICS(T_A = 25°C)

Parameter	Symbol	Min.	Typ	Max.	Unit	Conditions
Input voltage	$V_{I(off)}$	–	–	0.5	V	V_{CC}=5/-5V,I_O=100/-100mA
	$V_{I(on)}$	3	–	–	V	V_O=0.3/-0.3,I_O=2/-2mA
Output Voltage	$V_{O(on)}$	–	–	0.3	V	I_O=10/-10mA,I_I=0.5/-0.5mA
Input Current	I_I	–	–	0.18	mA	V_I=5/-5V
Output Current	$I_{O(off)}$	–	–	0.5	μA	V_{CC}=50/-50V,V_I=0V
DC Current Gain	G_I	68	–	–		I_O=5/-5mA,V_O=5/-5V
Input Resistance	R_1	32.9	47	61.1	kΩ	–
Resistance Ratio	R_2/R_1	0.8	1	1.2	–	–

LUMD12NDW1T1

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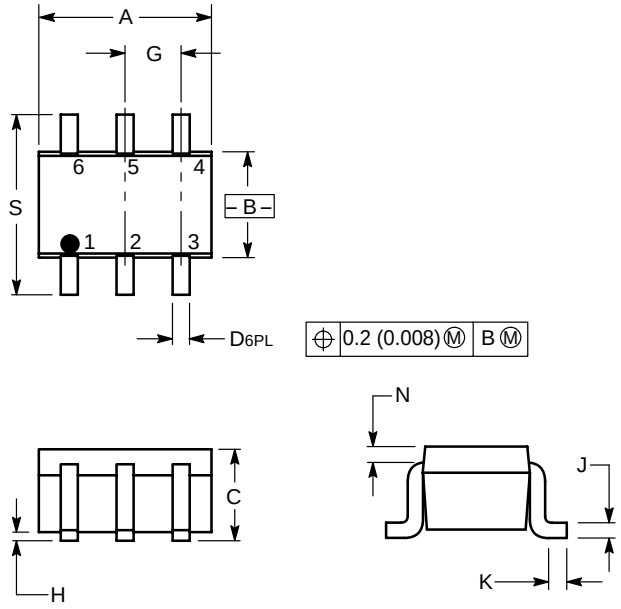

NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.071	0.087	1.80	2.20
B	0.045	0.053	1.15	1.35
C	0.031	0.043	0.80	1.10
D	0.004	0.012	0.10	0.30
G	0.026 BSC		0.65 BSC	
H	---	0.004	---	0.10
J	0.004	0.010	0.10	0.25
K	0.004	0.012	0.10	0.30
N	0.008 REF		0.20 REF	
S	0.079	0.087	2.00	2.20

PIN 1. EMITTER 2
2. BASE 2
3. COLLECTOR 1
4. EMITTER 1
5. BASE 1
6. COLLECTOR 2