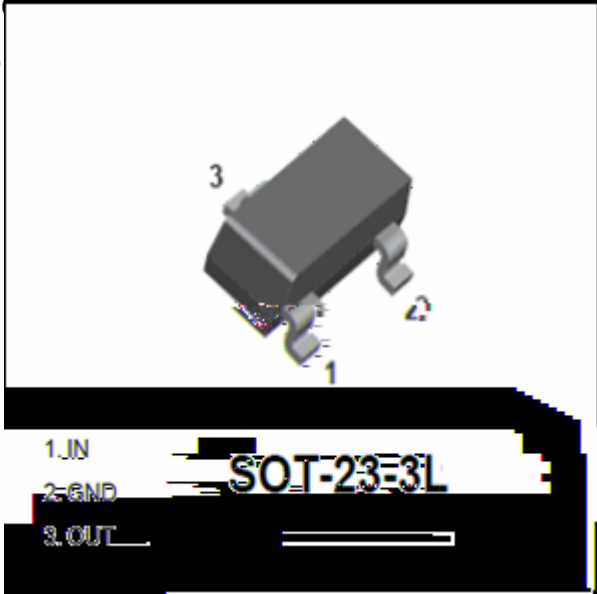


r circuit

connecting external input resistors,  
e mo Automatic



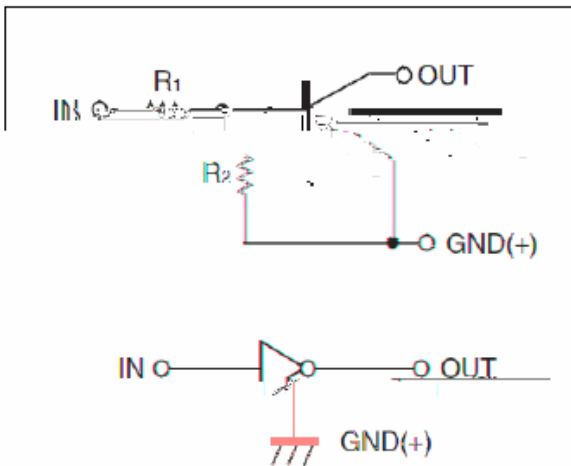
**Mechanical Data**

Package: SOT-23-3L

Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102

Marking: 14

**Equivalent circuit**



**Maximum Ratings** (Ta=25 Unless otherwise specified)

ITEM	SYMBOL	UNIT	VALUE
Supply Voltage	VCC	V	-50
Input Voltage	VIN	V	-40 to +10
Output Current	IO	mA	-100
Power Dissipation	PD	mW	200
Thermal Resistance, Junction to Ambient	R <sub>thJA</sub>	/W	625
Junction Temperature	T <sub>j</sub>		150
Storage Temperature	T <sub>stg</sub>		-55 to +150



# DTA114EKA

## Electrical Characteristics (Ta=25 unless otherwise specified)

ITEM	SYMBOL	UNIT	CONDITIONS	MIN	TYP	MAX
Input voltage	$V_{I(off)}$	V	VCC=-5V, Ic=-100uA	-0.5		
	$V_{I(on)}$	V	VO=-0.3V, Ic=-10mA			-3
Output voltage	$V_{O(on)}$	V	Io /Ii =-10mA/-0.5 mA			-0.3
Input current	I <sub>I</sub>	mA	VI=-5V			-0.88
Output current	$I_{O(off)}$	uA	VCC=-50V, Vi=0			-0.5
DC current gain	GI		Vo=-5V, Io =-5mA	30		
Input resistance	$R_1$	k		7	10	13
Resistance ratio	$R_2/R_1$			0.8	1	1.2
Transition frequency	f <sub>T</sub>	MHz	Vo=-10V, IO=-5mA, f=100MHz		250	

## Ordering Information (Example)

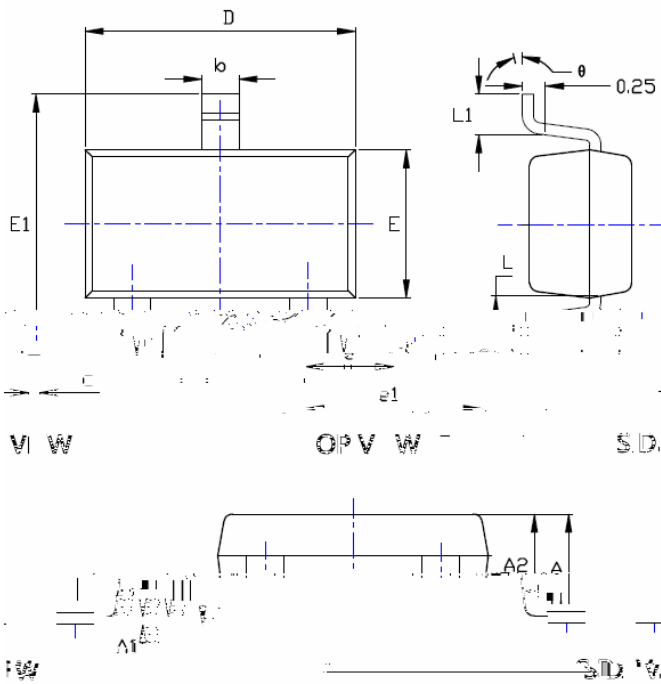
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
DTA114EKA	F2	Approximate 0.014	3000	30000	120000	7" reel





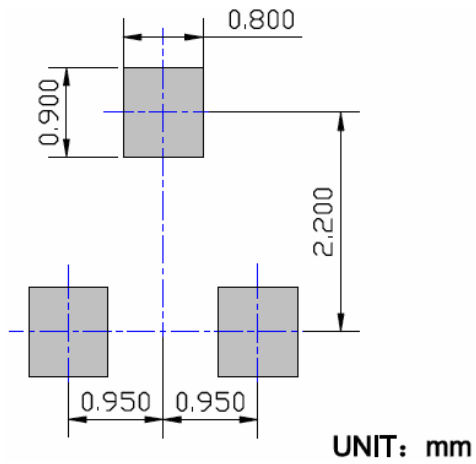
# DTA114EKA

## SOT-23-3L Package Outline Dimensions



SYMBOL	DIMENSIONS			
	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.041	0.049	1.050	1.250
A1	0.000	0.008	0.000	0.200
A2	0.041	0.045	1.050	1.150
D	0.039	0.047	1.000	1.200
E1	0.104	0.116	2.650	2.950
e	0.037 TYP.		0.950 TYP.	
e1	0.071	0.079	1.800	2.000
L	0.024 R1		0.600 R1	
L1	0.012	0.024	0.300	0.600
$\theta$	0°	8°	0°	8°

## SOT-23-3L Suggested Pad Layout



'7\$ (. \$

'LVFODLPHU

7KH LQIRUPDWLRQ SGRVH DMQHG LQ IRWLVH DQJH RKH BQJMLH (OHFWURQLF 7HFKQRO  
ULJKW WR PDNH FKDLQJH VRZLWKR XWS KRLS LURDG XIERQ/ RGLWSOD\HG KHUHLQ WR GLPSLWRY  
RU RWKHU ZLVH

7KH SURGXFW OLVWHG KHUHLQ LV GHVHWHG RQR FEHTXVLS BHZLW KR UR LGHLYLDFH VV DQG  
HTXLSPHQW RU GHYLFHV ZKLFK UHTSLW KH KEDXO OXQYHVOGRQ LURHOLMDEL BQJMLH DQJH  
PHGLFDO LQVWUXPHQW VIT WLSDFHGSVR U DHHURV SOXFFO HD EKLQDF WFRUP @PQAWUBQVPH V PISO