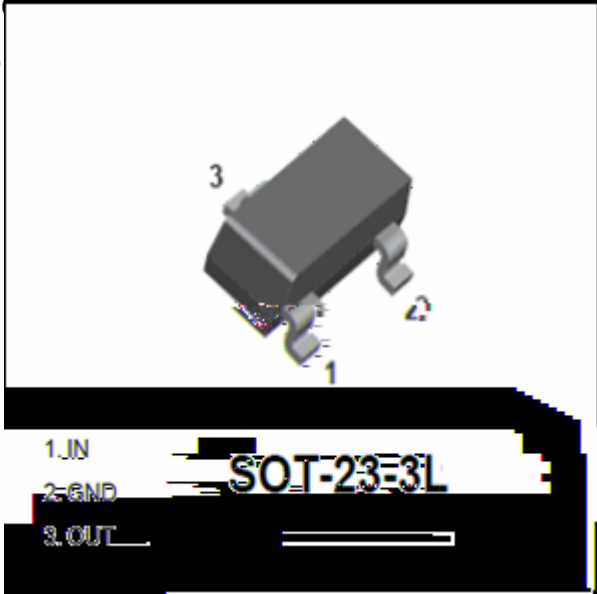


r circuit

connecting external input resistors,  
e mo Automatic



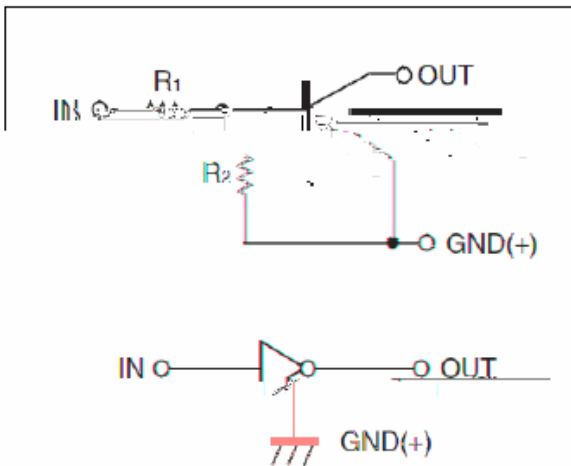
**Mechanical Data**

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)

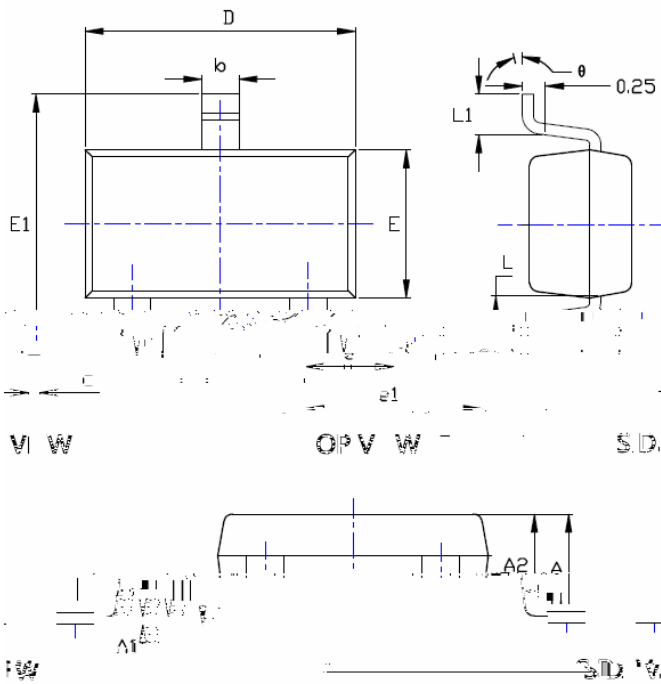
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
DTA114EKA	F2	Approximate 0.014	3000	30000	120000	7" reel





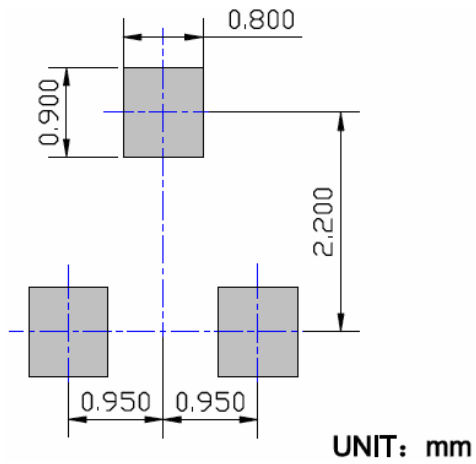
# DTA114EKA

## 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 R11		0.600 R11	
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 IRWLVKHDIHJHQRH BQJMLH (OHFWURQLF 7HFKQRO  
ULJKW WR PDNH FKDLQJHVRZLWKR XWSKRLSULFDGXIERQ/ RGLWSOD\HG KHUHLQ WRGLPVLWRQ  
RU RWKHUZZLVH

7KH SURGXFW OLVWHG KHUHLQ LV GHVQLHGWGRVOR FEHTXVLSBHZLWKRUR LGHLYLDFHVVWIDQG  
HTXLSPHQW RU GHYLFHV ZKLFK UHTSLW KHKEJDOXHQYHVOGRQLRHHOZLWDLORVSDXQFKU DXXPD  
PHGLFDO LQVWUXPHQW VITWLSDFHGSVR UWHHURV SOXFFOHDDEKULQDFWRUP @PQAWUBQVPHVLPISO