

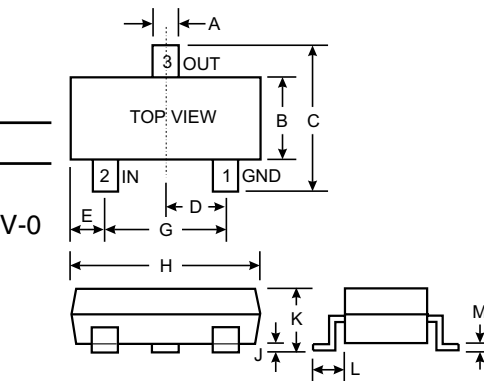
Features

- Epitaxial Planar Die Construction
- Complementary NPN Types Available (DDTC)
- Built-In Biasing Resistors, R1 = R2

UNDER DEVELOPMENT

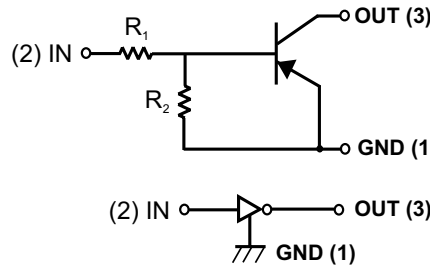
Mechanical Data

- Case: SC-59, Molded Plastic
- Case material - UL Flammability Rating 94V-0
- Terminals: Solderable per MIL-STD-202, Method 208
- Terminal Connections: See Diagram
- Weight: 0.008 grams (approx.)



SC-59		
Dim	Min	Max
A	0.30	0.50
B	1.40	1.80
C	2.50	3.00
D	0.85	1.05
E	0.30	0.70
G	1.70	2.10
H	2.70	3.10
J	—	0.10
K	1.00	1.40
L	0.55	0.70
M	0.10	0.35
All Dimensions in mm		

P/N	R1, R2 (NOM)	MARKING
DDTA123EKA	2.2K	P04
DDTA143EKA	4.7K	P08
DDTA114EKA	10K	P13
DDTA124EKA	22K	P17
DDTA144EKA	47K	P20
DDTA115EKA	100K	P24



SCHMATIC DIAGRAM

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Supply Voltage, (3) to (1)	V _{CC}	-50	V
Input Voltage, (2) to (1)	V _{IN}	+10 to -12 +10 to -30 +10 to -40 +10 to -40 +10 to -40 +10 to -40 +10 to -40	V
Output Current	I _O	-100 -100 -50 -30 -100 -20	mA
Output Current	I _C (Max)	-100	mA
Power Dissipation	P _d	200	mW
Operating and Storage and Temperature Range	T _j , T _{STG}	-55 to +150	°C

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic		Symbol	Min	Typ	Max	Unit	Test Condition
Input Voltage		$V_{I(\text{off})}$	-0.5	-1.1	—	V	$V_{CC} = -5V, I_O = -100\mu\text{A}$
		$V_{I(\text{on})}$	—	-1.9	-3		$V_O = -0.3V, I_O = -20\text{mA}$, DDTA123EKA $V_O = -0.3V, I_O = -20\text{mA}$, DDTA143EKA $V_O = -0.3V, I_O = -10\text{mA}$, DDTA114EKA $V_O = -0.3V, I_O = -5\text{mA}$, DDTA124EKA $V_O = -0.3V, I_O = -2\text{mA}$, DDTA144EKA $V_O = -0.3V, I_O = -1\text{mA}$, DDTA115EKA
Output Voltage		$V_{O(\text{on})}$	—	-0.1	-0.3	V	$I_O/I_I = -10\text{mA}/-0.5\text{mA}$, DDTA123EKA $I_O/I_I = -10\text{mA}/-0.5\text{mA}$, DDTA143EKA $I_O/I_I = -10\text{mA}/-0.5\text{mA}$, DDTA114EKA $I_O/I_I = -10\text{mA}/-0.5\text{mA}$, DDTA124EKA $I_O/I_I = -10\text{mA}/-0.5\text{mA}$, DDTA144EKA $I_O/I_I = -5\text{mA}/-0.25\text{mA}$, DDTA115EKA
Input Current	DDTA123EKA DDTA143EKA DDTA114EKA DDTA124EKA DDTA144EKA DDTA115EKA	I_I	—	—	-3.8 -1.8 -0.88 -0.36 -0.18 -0.15	mA	$V_I = -5V$
Output Current		$I_{O(\text{off})}$	—	—	-0.5	μA	$V_{CC} = -50V, V_I = 0V$
DC Current Gain	DDTA123EKA DDTA143EKA DDTA114EKA DDTA124EKA DDTA144EKA DDTA115EKA	G_I	20 20 30 56 68 82	—	—	—	$V_O = -5V, I_O = -20\text{mA}$ $V_O = -5V, I_O = -10\text{mA}$ $V_O = -5V, I_O = -5\text{mA}$ $V_O = -5V, I_O = -5\text{mA}$ $V_O = -5V, I_O = -5\text{mA}$ $V_O = -5V, I_O = -5\text{mA}$
Resistance Ratio		R_2/R_1	0.8	1	1.2	—	—
Gain-Bandwidth Product*		f_T	—	250	—	MHz	$V_{CE} = -10V, I_E = 5\text{mA}$, $f = 100\text{MHz}$

* Transistor - For Reference Only

UNDER DEVELOPMENT