

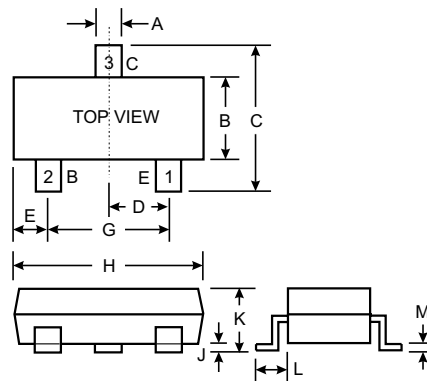
Features

- Epitaxial Planar Die Construction
- Complementary NPN Types Available (DDTC)
- Built-In Biasing Resistor, R2 only

Mechanical Data

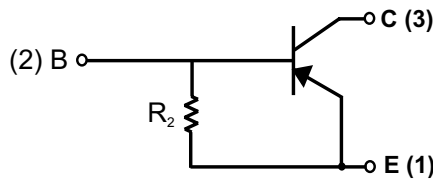
- Case: SOT-23, Molded Plastic
- Case material - UL Flammability Rating 94V-0
- Terminals: Solderable per MIL-STD-202, Method 208
- Terminal Connections: See Diagram
- Weight: 0.008 grams (approx.)

UNDER DEVELOPMENT



SOT-23		
Dim	Min	Max
A	0.37	0.51
B	1.19	1.40
C	2.10	2.50
D	0.89	1.05
E	0.45	0.61
G	1.78	2.05
H	2.65	3.05
J	0.013	0.15
K	0.89	1.10
L	0.45	0.61
M	0.076	0.178
All Dimensions in mm		

P/N	R2 (NOM)	MARKING
DDTA114GCA	10K	P26
DDTA124GCA	22K	P27
DDTA144GCA	47K	P28
DDTA115GCA	100K	P29



SCHEMATIC DIAGRAM

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Collector-Base Voltage	V _{CBO}	-50	V
Collector-Emitter Voltage	V _{CEO}	-50	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector 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
Collector-Base Breakdown Voltage		BV_{CBO}	-50	—	—	V	$I_C = -50\mu\text{A}$
Collector-Emitter Breakdown Voltage		BV_{CEO}	-50	—	—	V	$I_C = -1\text{mA}$
Emitter-Base Breakdown Voltage		BV_{EBO}	5	—	—	V	$I_E = -720\mu\text{A}$, DDTA114GCA $I_E = -330\mu\text{A}$, DDTA124GCA $I_E = -160\mu\text{A}$, DDTA144GCA $I_E = -72\mu\text{A}$, DDTA115GCA
Collector Cutoff Current		I_{CBO}	—	—	-0.5	μA	$V_{CB} = -50\text{V}$
Emitter Cutoff Current	DDTA114GCA DDTA124GCA DDTA144GCA DDTA115GCA	I_{EBO}	-300 -140 -65 -30	—	-580 -260 -130 -58	μA	$V_{EB} = -4\text{V}$
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	—	—	-0.3	V	$I_C = -10\text{mA}$, $I_B = -0.5\text{mA}$
DC Current Transfer Ratio	DDTA114GCA DDTA124GCA DDTA144GCA DDTA115GCA	h_{FE}	30 56 68 82	—	—	—	$I_C = -5\text{mA}$, $V_{CE} = -5\text{V}$
Gain-Bandwidth Product*		f_T	—	250	—	MHz	$V_{CE} = -10\text{V}$, $I_E = 5\text{mA}$, $f = 100\text{MHz}$

* Transistor - For Reference Only

UNDER DEVELOPMENT