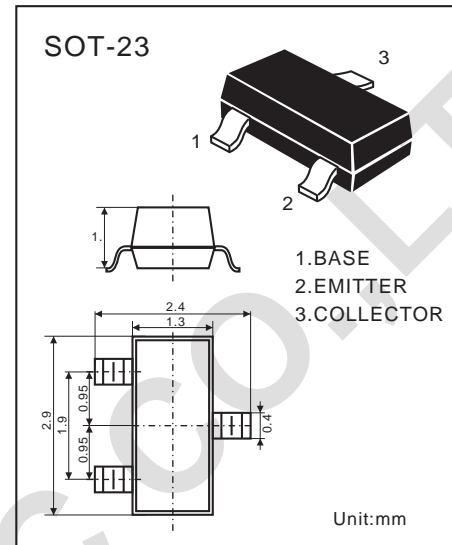


PNP EPITAXIAL SILICON TRANSISTOR

2W OUTPUT AMPLIFIER OF PORTABLE
RADIO IN CLASS
B PUSH-PULL OPERATION

- Complement to MMPT2SC3265LT1
- Collector-current: $I_c = -500\text{mA}$
- High Total Power Dissipation: $P_c = 225\text{mW}$



ABSOLUTE MAXIMUM RATINGS

($T_a = 25^\circ\text{C}$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	-40	V
Collector-Emitter Voltage	V_{CEO}	-25	V
Emitter-Base Voltage	V_{EB}	-6	V
Collector Current	I_c	-500	mA
Collector Dissipation $T_a = 25^\circ\text{C}^*$	P_D	225	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55-150	$^\circ\text{C}$

Electrical Characteristics

($T_a = 25^\circ\text{C}$)

Characteristic	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Collector-Base Breakdown Voltage	BV_{CB0}	-40			V	$I_c = -100\mu\text{A}$ $I_E = 0$
Collector-Emitter Breakdown Voltage#	BV_{CEO}	-25			V	$I_c = -1\text{mA}$ $I_B = 0$
Emitter-Base Breakdown Voltage	BV_{EBO}	-6			V	$I_E = -100\mu\text{A}$ $I_c = 0$
Collector-Base Cutoff Current	I_{CB0}			-100	nA	$V_{CB} = -35\text{V}$, $I_E = 0$
Emitter-Base Cutoff Current	I_{EBO}			-100	nA	$V_{EB} = -6\text{V}$, $I_c = 0$
DC Current Gain	h_{FE1}	45	170			$V_{CE} = -1\text{V}$, $I_c = -5\text{mA}$
DC Current Gain	h_{FE2}	85	160	300		$V_{CE} = -1\text{V}$, $I_c = -50\text{mA}$
DC Current Gain	h_{FE3}	30	80			$V_{CE} = -1\text{V}$, $I_c = -500\text{mA}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.28	-0.6	V	$I_c = -500\text{mA}$, $I_B = -50\text{mA}$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-0.98	-1.2	V	$I_c = -500\text{mA}$, $I_B = -50\text{mA}$
Base-Emitter On Voltage	$V_{BE(sat)}$		-0.66	1	V	$I_{CE} = -1\text{mA}$, $I_c = -10\text{mA}$
Output Capacitance	C_{ob}		15		PF	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$
Current Gain-Bandwidth Product	f_T	100	200		MHz	$V_{CE} = -10\text{V}$, $I_c = -50\text{mA}$

*Total Device Dissipation: FR=1X0.75X0.062 in Board Derate 25°C

#Pulse Test: Pulse Width 300 μs Duty cycle 2%

DEVICE MARKING:

2SA1298LT1=B6