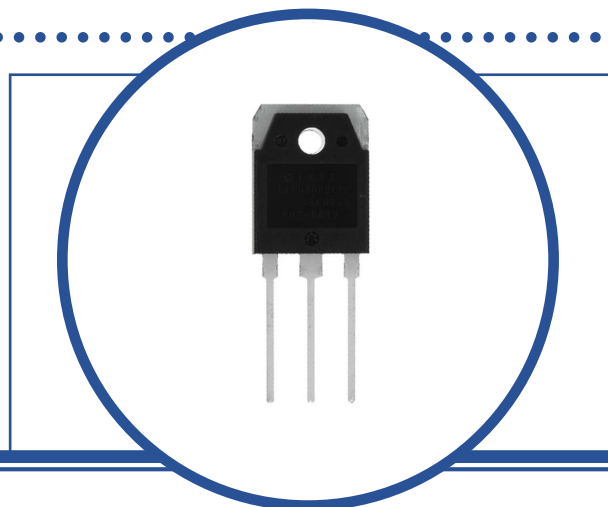


SILICON EPITAXIAL PLANAR PNP TRANSISTOR

MG9410, MG9410-R

- TO-3P Plastic Package
- Complimentary NPN – MG6330
- Designed specifically for audio power amplifier applications
- High Current audio bipolar with wide Safe Operating Area



ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise stated)

		MG9410	MG9410-R
V_{CBO}	Collector – Base Voltage	-230V	-260V
V_{CEO}	Collector – Emitter Voltage	-230V	-260V
V_{EBO}	Emitter – Base Voltage	-5V	
I_C	Continuous Collector Current	-15A	
I_B	Base Current	-4A	
P_D	Total Power Dissipation at $T_A = 25^\circ\text{C}$	200W	
T_J	Maximum Junction Temperature	150°C	
T_{stg}	Storage Temperature Range	-55 to +150°C	

THERMAL PROPERTIES

Symbols	Parameters	Min.	Typ.	Max.	Units
$R_{\theta JC}$	Thermal Resistance, Junction To Case			0.63	°C/W

Semelab Limited reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing orders.

SILICON EPITAXIAL PNP TRANSISTOR MG9410, MG9410-R

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise stated)

Symbols	Parameters	Test Conditions		Min.	Typ	Max.	Units
I_{CBO}	Collector-Cut-Off Current	MG9410	$V_{CB} = -230\text{V}$			-100	μA
		MG9410-R	$V_{CB} = -260\text{V}$				
I_{EBO}	Emitter-Cut-Off-Current	$V_{EB} = -5\text{V}$				-100	μA
$V_{(BR)CEO}$	Collector-Base Breakdown Voltage	$I_C = -25\text{mA}$	MG9410	-230			V
			MG9410-R	-260			
$V_{CE(sat)}^{(1)}$	Collector-Emitter Saturation Voltage	$I_C = -5\text{A}$	$I_B = -0.5\text{A}$			-2.0	V
h_{FE}	Forward-current transfer ratio	$I_C = -5\text{A}$	$V_{CE} = -4\text{V}$	70		140	

DYNAMIC CHARACTERISTICS

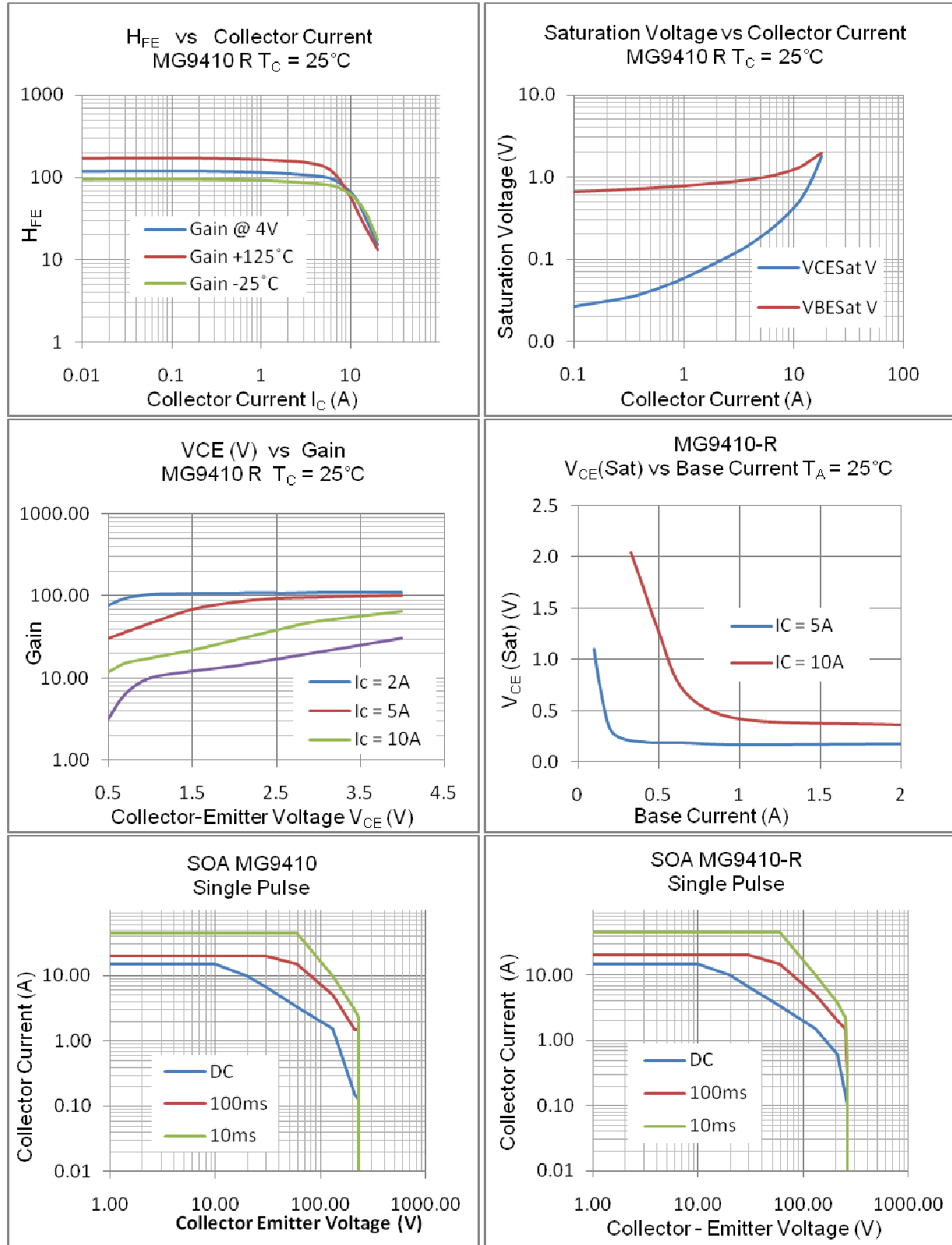
f_T	Transition Frequency	$I_E = 2\text{A}$	$V_{CE} = -12\text{V}$		35		MHz
C_{OB}	Output Capacitance	$V_{CB} = -10\text{V}$	$f = 1.0\text{MHz}$		500		pF

Notes

Pulse Width $\leq 300\mu\text{s}$, $\delta \leq 2\%$

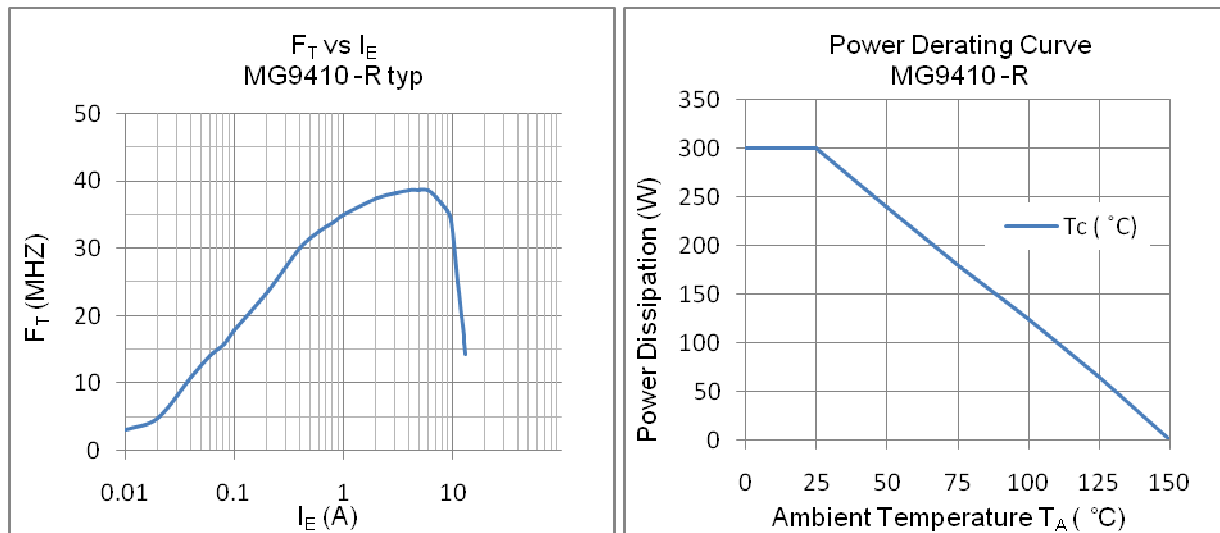
SILICON EPITAXIAL PNP TRANSISTOR MG9410, MG9410-R

TYPICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise stated)



SILICON EPITAXIAL PNP TRANSISTOR MG9410, MG9410-R

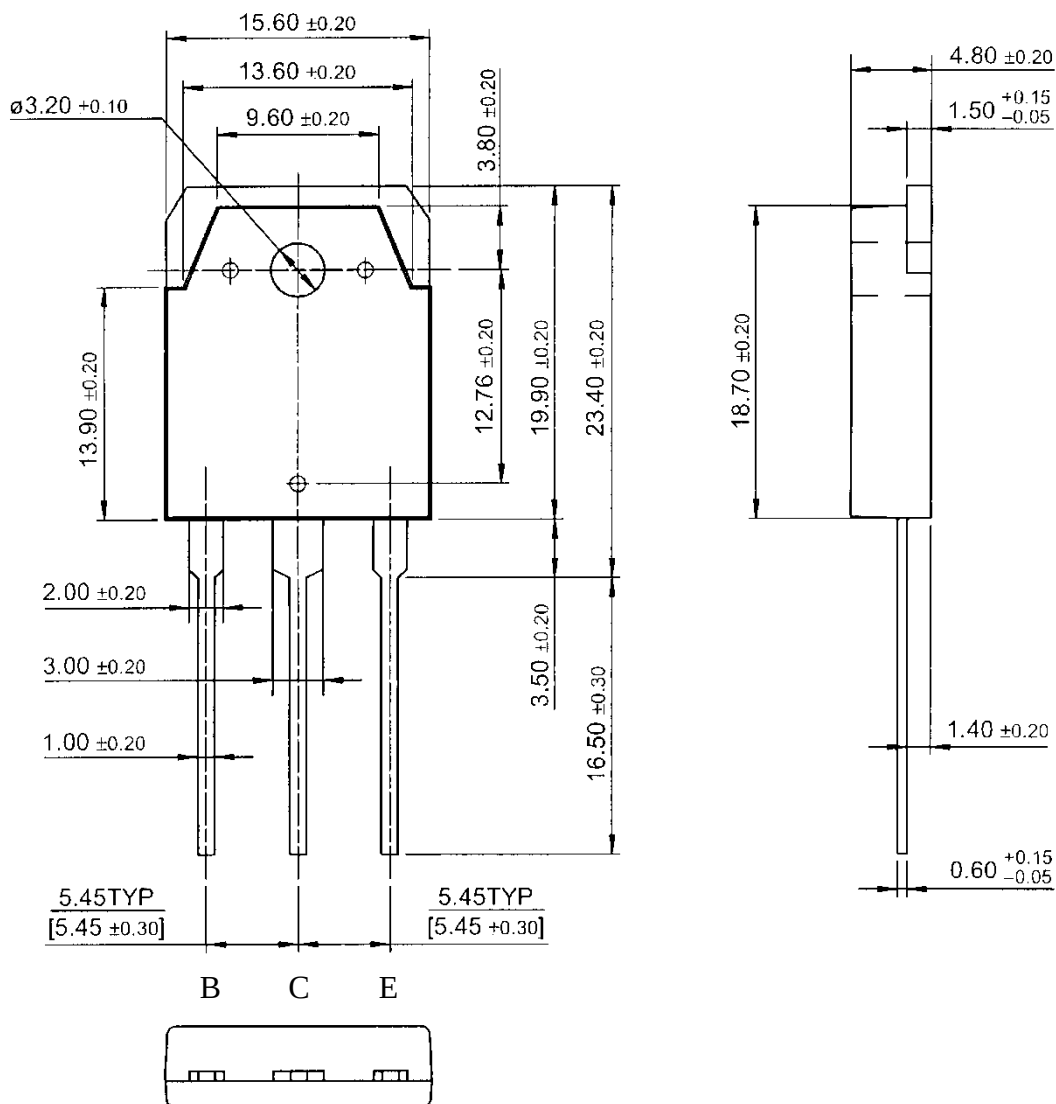
TYPICAL CHARACTERISTICS CONTINUED ($T_A = 25^\circ\text{C}$ unless otherwise stated)



SILICON EPITAXIAL PNP TRANSISTOR MG9410, MG9410-R

MECHANICAL DATA

Dimensions in mm (inches)



TO3P

Pin1 – Base

Pin2 – Collector

Pin3 - Emitter