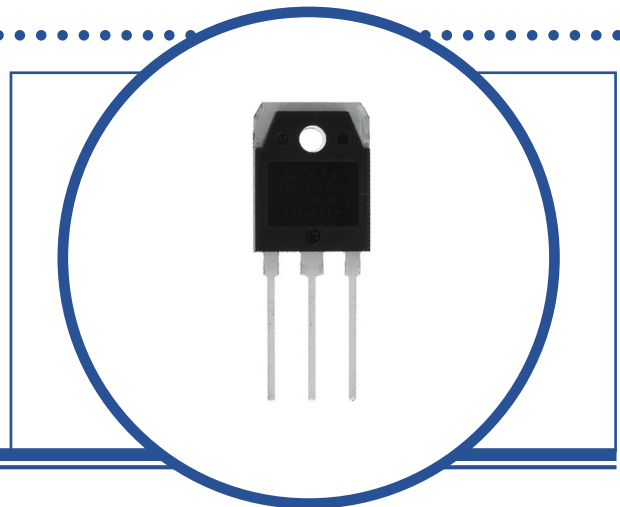


SILICON EPITAXIAL PLANAR PNP TRANSISTOR

MG9411, MG9411-R

- TO-3P Plastic Package
- Complimentary NPN – MG6331
- Designed specifically for audio power amplifier applications
- Highest Current audio bipolar available on the market with widest Safe Operating Area in TO-3P package



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

		MG9411	MG9411-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		-18A
I_B	Base Current		-4A
P_D	Total Power Dissipation at $T_A = 25^\circ\text{C}$		300W
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			0.42	°C/W

SILICON EPITAXIAL PNP TRANSISTOR MG9411, MG9411-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	MG9411	$V_{CB} = -230\text{V}$			-10	μA
		MG9411-R	$V_{CB} = -260\text{V}$				
I_{EBO}	Emitter-Cut-Off-Current	$V_{EB} = -5\text{V}$				-10	μA
$V_{(BR)CEO}$	Collector-Base Breakdown Voltage	$I_C = -25\text{mA}$	MG9411	-230			V
			MG9411-R	-260			
$V_{CE(sat)}^{(1)}$	Collector-Emitter Saturation Voltage	$I_C = -5\text{A}$	$I_B = -0.5\text{A}$			-0.5	V
h_{FE}	Forward-current transfer ratio	$I_C = -5\text{A}$	$V_{CE} = -4\text{V}$	70		140	

DYNAMIC CHARACTERISTICS

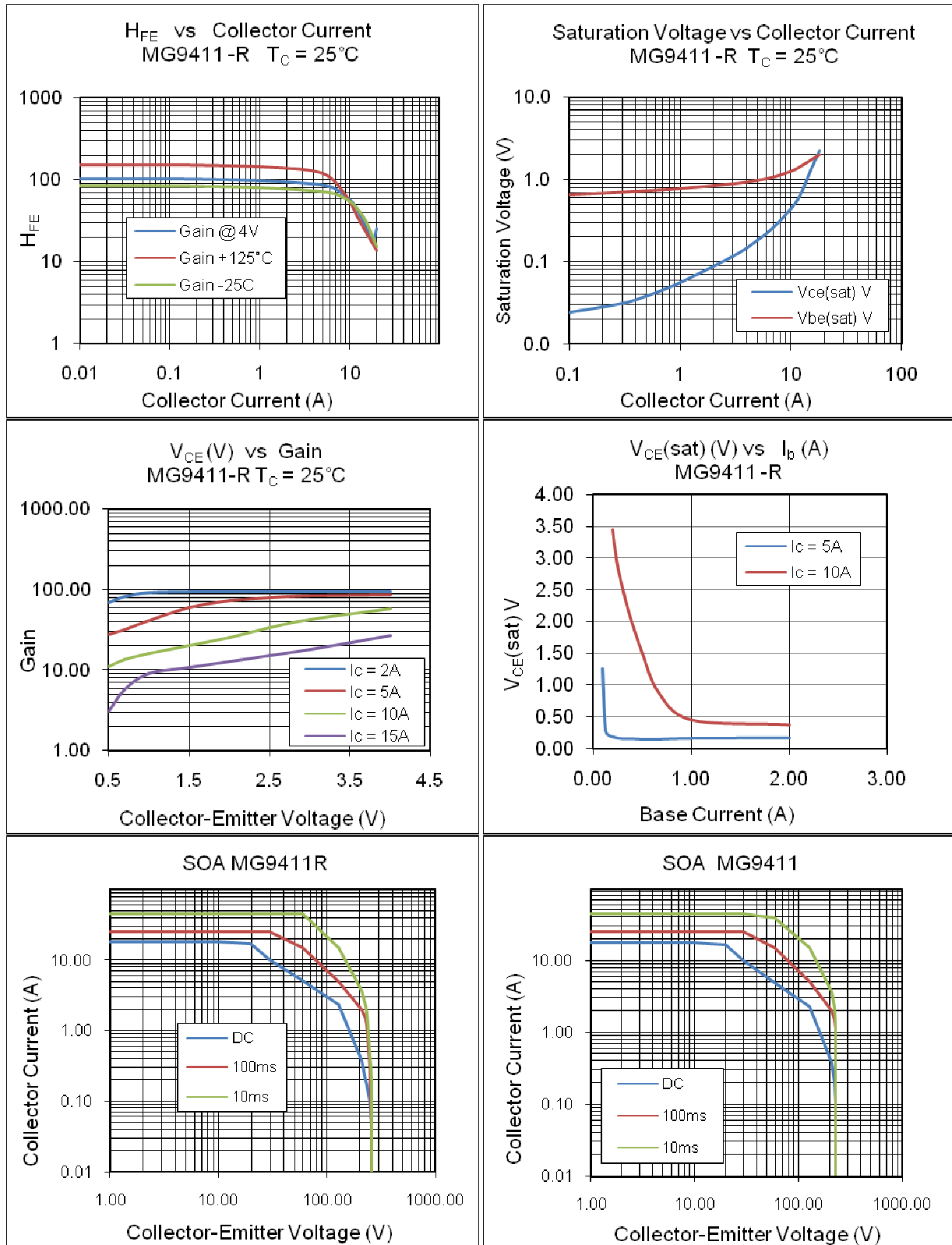
f_T	Transition Frequency	$I_E = 2\text{A}$	$V_{CE} = -12\text{V}$		35		MHz
C_{OB}	Output Capacitance	$V_{CB} = -10\text{V}$	$f = 1.0\text{MHz}$		500		pF

Notes

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

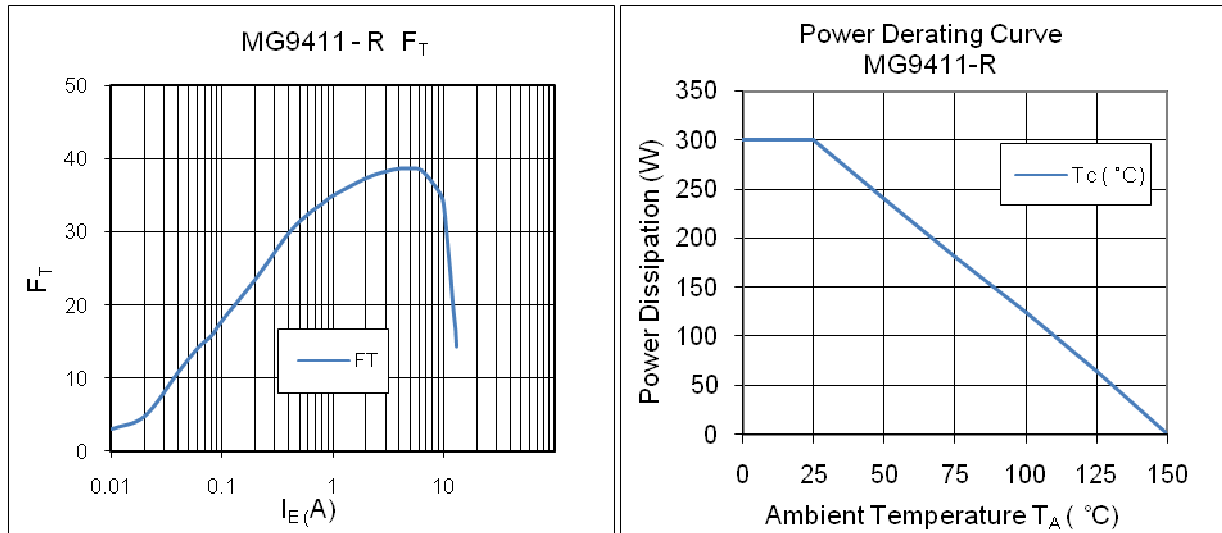
SILICON EPITAXIAL PNP TRANSISTOR MG9411, MG9411-R

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



SILICON EPITAXIAL PNP TRANSISTOR MG9411, MG9411-R

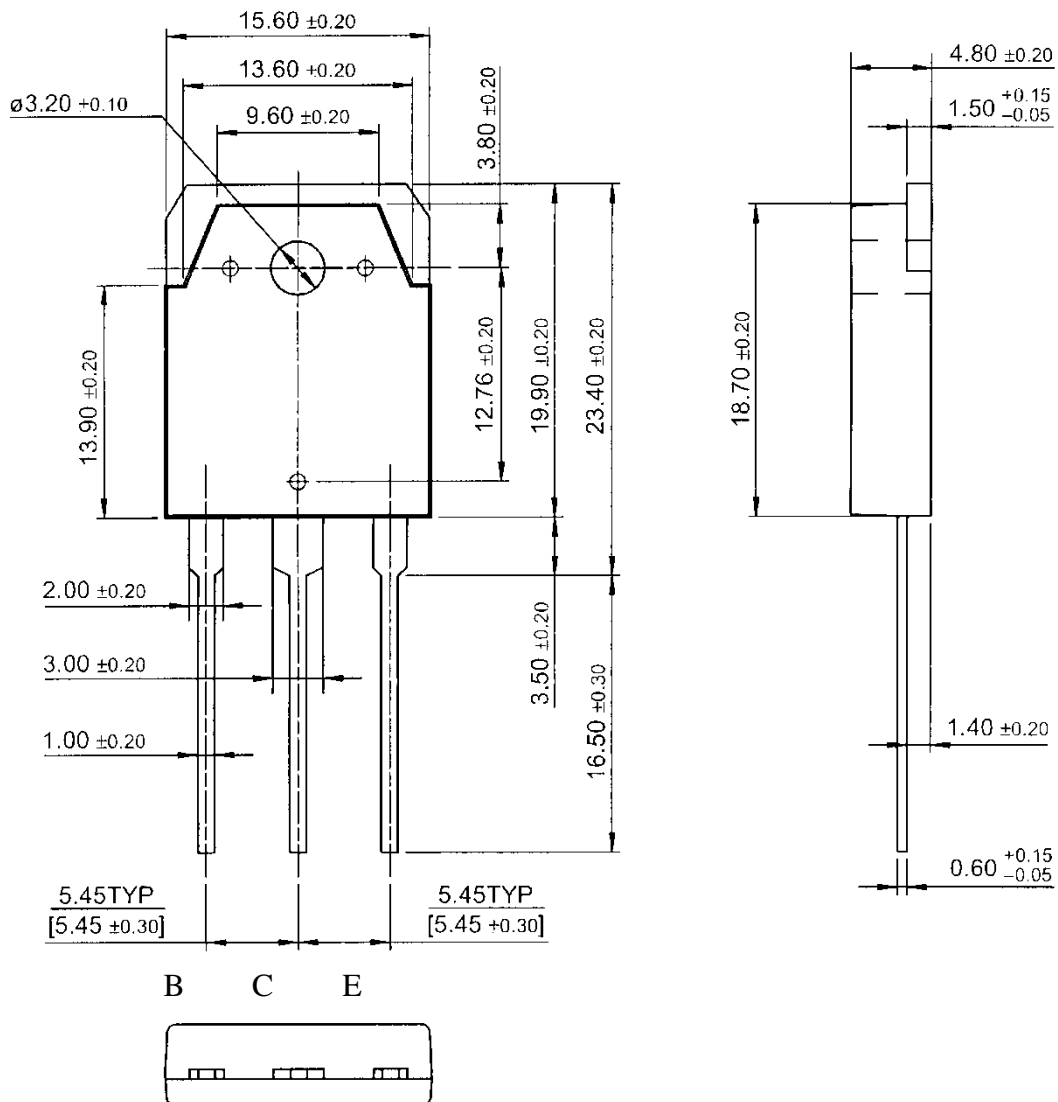
TYPICAL CHARACTERISTICS CONTINUED ($T_A = 25^\circ\text{C}$ unless otherwise stated)



SILICON EPITAXIAL PNP TRANSISTOR MG9411, MG9411-R

MECHANICAL DATA

Dimensions in mm (inches)



B C E

TO3P
Pin1 – Base Pin2 – Collector Pin3 - Emitter