

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

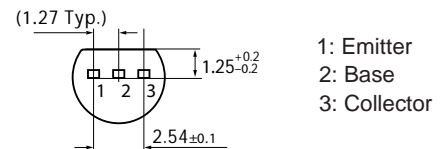
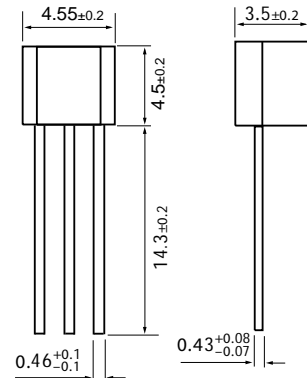
TO-92

FEATURES

Power Dissipation

MAXIMUM RATINGS* T_A=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V _{CB0}	Collector-Base Voltage	-40	V
V _{CEO}	Collector-Emitter Voltage	-40	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-600	mA
P _C *	Collector Power dissipation	0.625	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55to +150	°C
R _{θJA}	Thermal Resistance, junction to Ambient	357	°C/mW

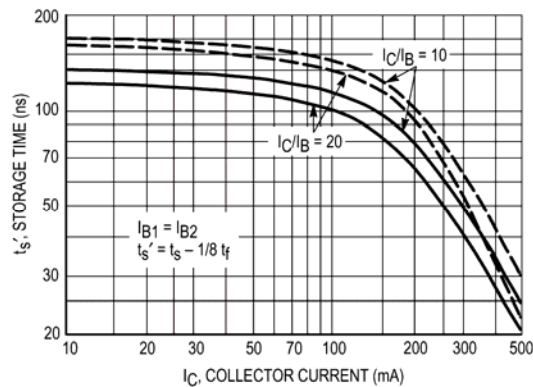
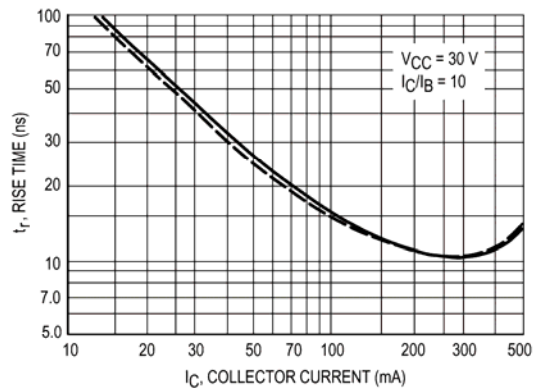
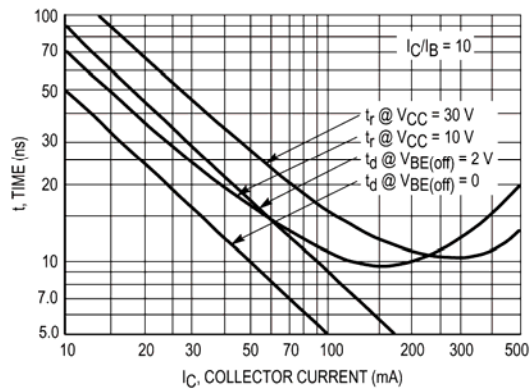
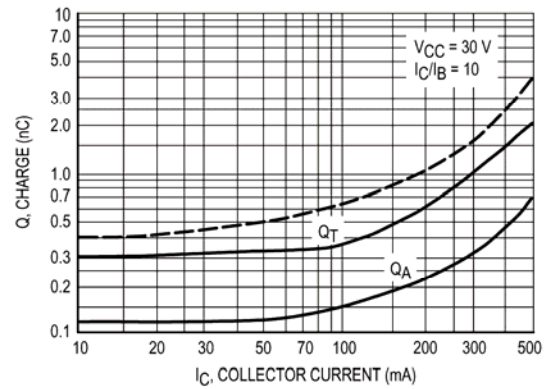
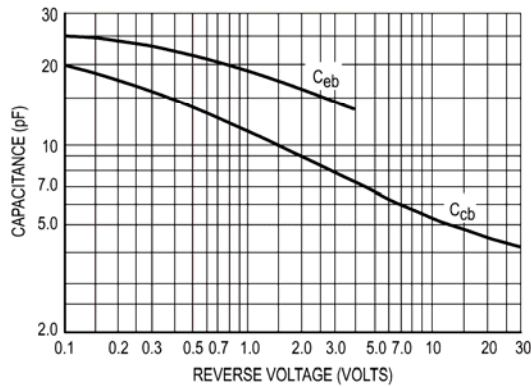


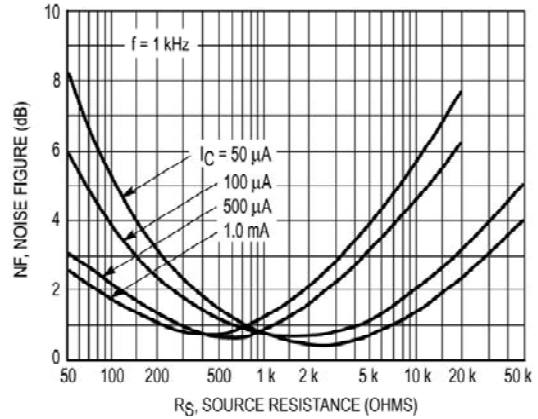
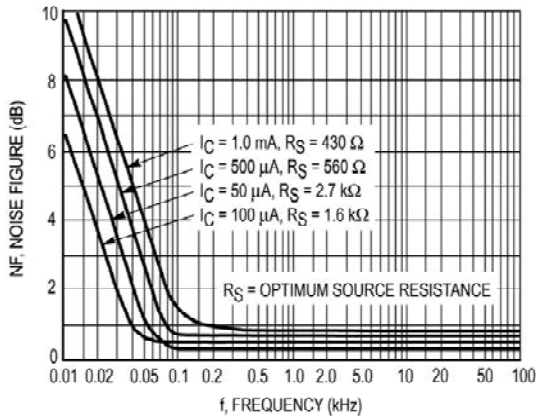
ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-100μA, I _E =0	-40			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-1mA, I _B =0	-40			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-100μA, I _C =0	-6			V
Collector cut-off current	I _{CB0}	V _{CB} =-35V, I _E =0			-100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =-5V, I _C =0			-100	nA
DC current gain	h _{FE(1)}	V _{CE} =-1V, I _C =-0.1mA	30			
	h _{FE(2)}	V _{CE} =-1V, I _C =-1mA	60			
	h _{FE(3)}	V _{CE} =-1V, I _C =-10mA	100			
	h _{FE(4)}	V _{CE} =-1V, I _C =-150mA	100		300	
	h _{FE(5)}	V _{CE} =-2V, I _C =-500mA	20			
Collector-emitter saturation voltage	V _{CE(sat)1}	I _C =-150mA, I _B =-15mA			-0.4	V
	V _{CE(sat)2}	I _C =-500mA, I _B =-50mA			-0.75	V
Base-emitter saturation voltage	V _{BE(sat)1}	I _C =-150mA, I _B =-15mA	-0.75		-0.95	V
	V _{BE(sat)2}	I _C =-500mA, I _B =-50mA			-1.3	V
Transition frequency	f _T	V _{CE} =-10V, I _C =-20mA, f=100MHz	200			MHz
Collector capacitance	C _{ob}	V _{CB} =-10V, I _E =0, f=100KHz			8.5	pF
Delay time	t _d	V _{CC} =-30V, I _C =-150mA I _{B1} =- I _{B2} =-15mA			15	nS
Rise time	t _r				20	nS
Storage time	t _s				225	nS
Fall time	t _f				30	nS

Typical Characteristics

2N4403





$V_{CE} = -10 \text{ Vdc}$, $f = 1.0 \text{ kHz}$, $T_A = 25^\circ\text{C}$

This group of graphs illustrates the relationship between h_{fe} and other "h" parameters for this series of transistors. To obtain these curves, a high-gain and a low-gain unit were

selected from the MMBT4403LT1 lines, and the same units were used to develop the correspondingly-numbered curves on each graph.

