

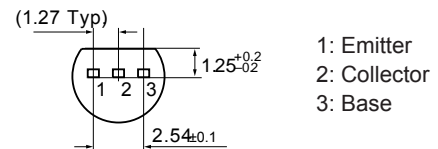
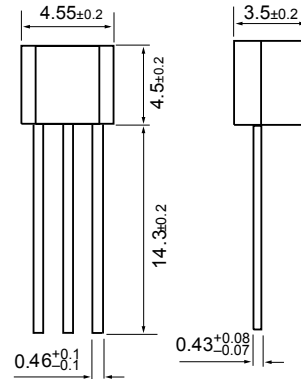
RoHS Compliant Product

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

Features

* Power Dissipation:
 P_{CM} : 625 mW ($T_{amb}=25^{\circ}C$)

TO-92



1: Emitter
2: Collector
3: Base

MAXIMUM RATINGS* $T_A=25^{\circ}C$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current –Continuous	-3	A
P_C	Collector Dissipation	0.625	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature	-55~150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

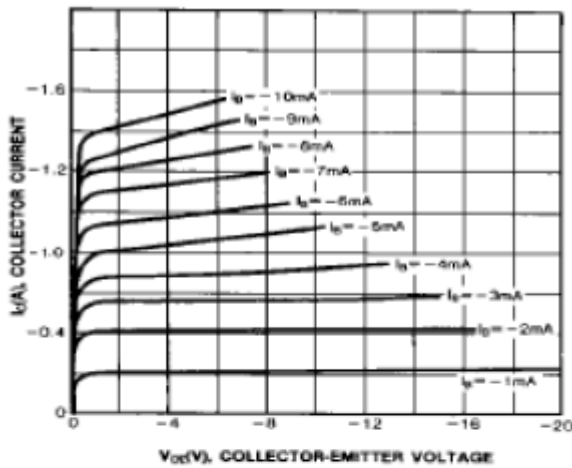
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V(BR)_{CBO}$	$I_C=-100 \mu A$, $I_E=0$	-40			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	$I_C=-10 mA$, $I_B=0$	-30			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	$I_E=-100 \mu A$, $I_C=0$	-6			V
Collector cut-off current	I_{CBO}	$V_{CB}=-40 V$, $I_E=0$			-1	μA
Collector cut-off current	I_{CEO}	$V_{CE}=-30 V$, $I_B=0$			-10	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-6 V$, $I_C=0$			-1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=-2V$, $I_C=-1A$	60		400	
	$h_{FE(2)}$	$V_{CE}=-2V$, $I_C=-100mA$	32			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-2A$, $I_B=-0.2A$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-2A$, $I_B=-0.2A$			-1.5	V
Transition frequency	f_T	$V_{CE}=-5V$, $I_C=-0.1A$ $f = 10MHz$	50			MHz

CLASSIFICATION OF $h_{FE(1)}$

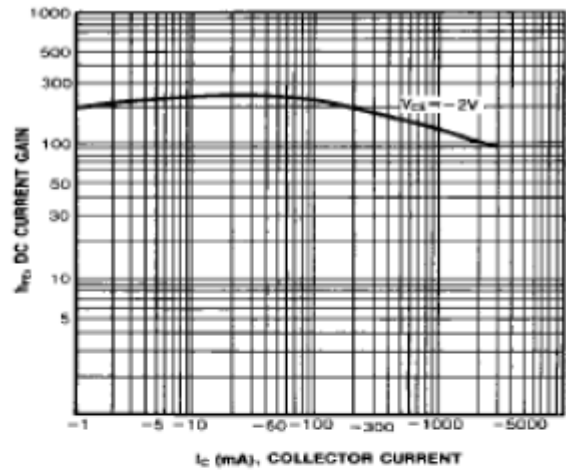
Rank	R	O	Y	GR
Range	60-120	100-200	160-320	200-400

Typical Characteristics

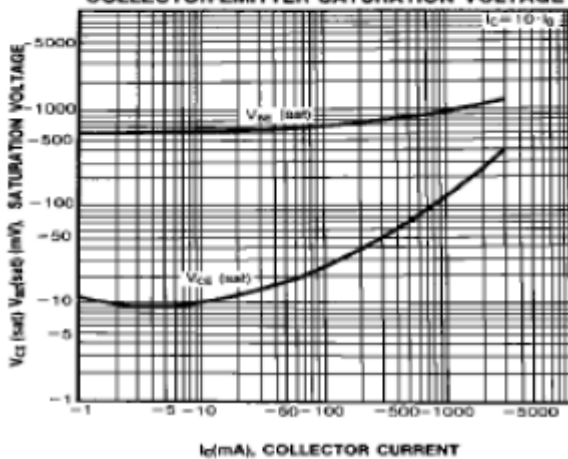
STATIC CHARACTERISTIC



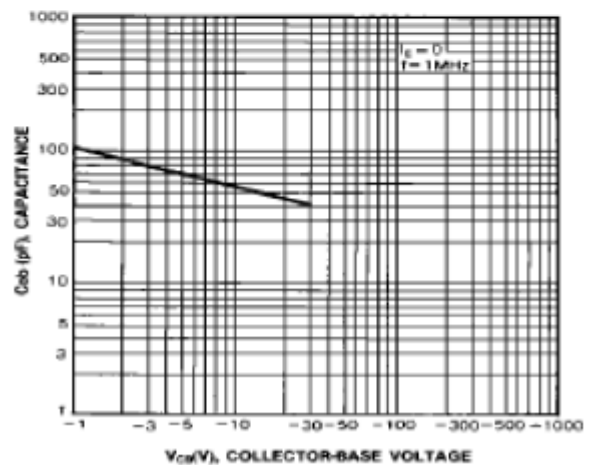
DC CURRENT GAIN



**BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE**



COLLECTOR OUTPUT CAPACITANCE



CURRENT GAIN-BANDWIDTH PRODUCT

