

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- High DC Current gain
- Complementary to 2SB624

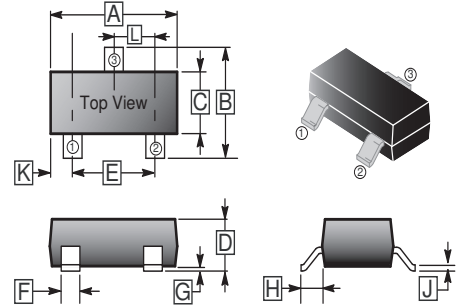
MARKING

DV4

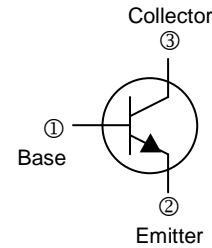
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch

SOT-23



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.80	3.04	G	0.09	0.18
B	2.10	2.55	H	0.45	0.60
C	1.20	1.40	J	0.08	0.177
D	0.89	1.15	K	0.6 REF.	
E	1.78	2.04	L	0.89	1.02
F	0.30	0.50			



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

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CB0}	30	V
Collector to Emitter Voltage	V_{CEO}	25	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current - Continuous	I_C	700	mA
Collector Power Dissipation	P_C	200	mW
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150	$^\circ\text{C}$

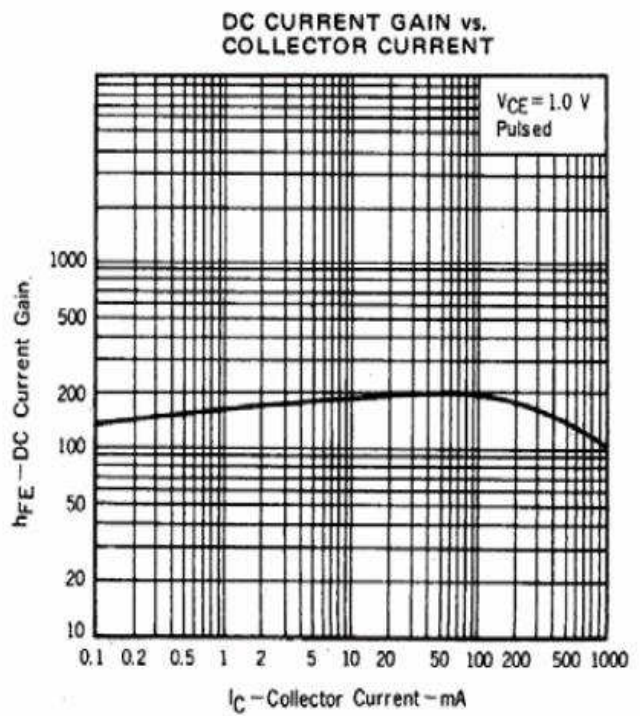
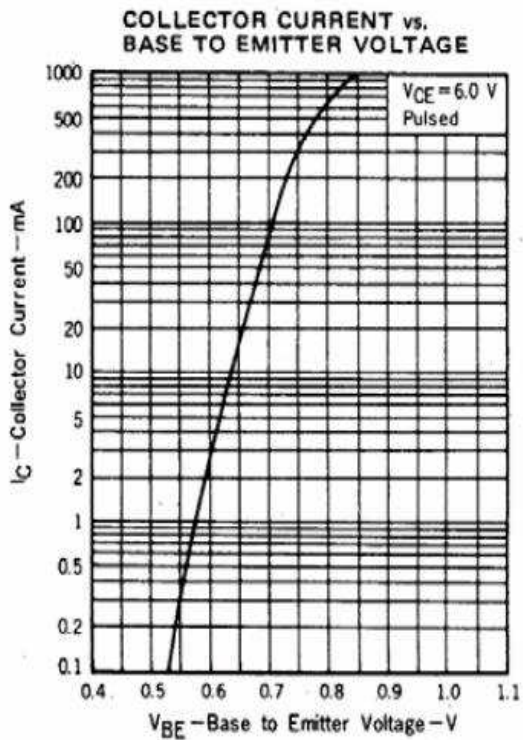
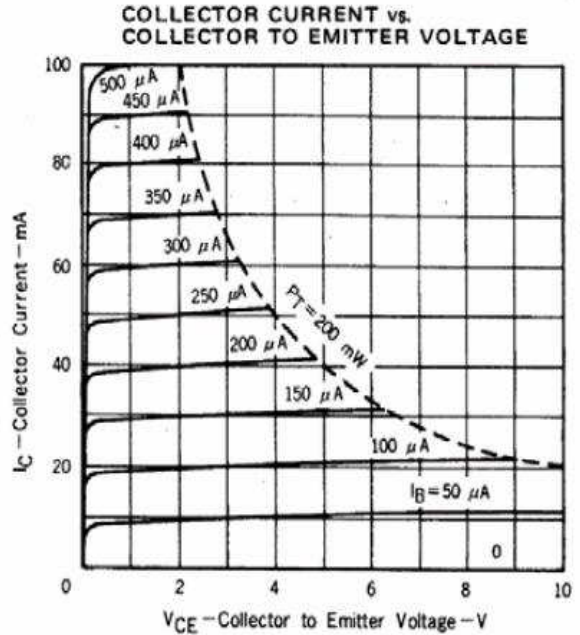
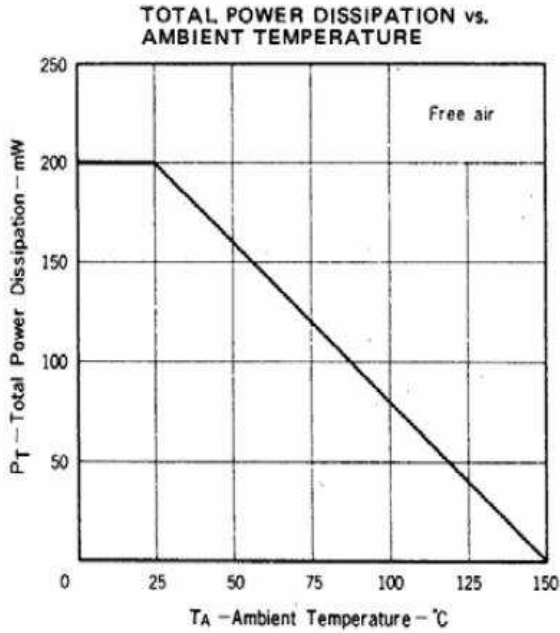
ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	30	-	-	V	$I_C=100\mu\text{A}, I_E=0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	25	-	-	V	$I_C=1\text{mA}, I_B=0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	5	-	-	V	$I_E=100\mu\text{A}, I_C=0$
Collector Cut-Off Current	I_{CBO}	-	-	0.1	μA	$V_{CB}=30\text{V}, I_E=0$
Emitter Cut-Off Current	I_{EBO}	-	-	0.1	μA	$V_{EB}=5\text{V}, I_C=0$
DC Current Gain ¹	$h_{FE(1)}$	200	-	320		$V_{CE}=1\text{V}, I_C=100\text{mA}$
	$h_{FE(2)}$	50	-	-		$V_{CE}=1\text{V}, I_C=700\text{mA}$
Collector to Emitter Saturation Voltage ¹	$V_{CE(sat)}$	-	-	0.6	V	$I_C=700\text{mA}, I_B=70\text{mA}$
Base to Emitter Saturation Voltage ¹	V_{BE}	0.6	-	0.7	V	$V_{CE}=6\text{V}, I_C=10\text{mA}$
Transition Frequency	f_T	170	-	-	MHz	$V_{CE}=6\text{V}, I_C=10\text{mA}$
Collector output capacitance	C_{ob}	-	12	-	pF	$V_{CB}=6\text{V}, I_E=0, f=10\text{MHz}$

Note:

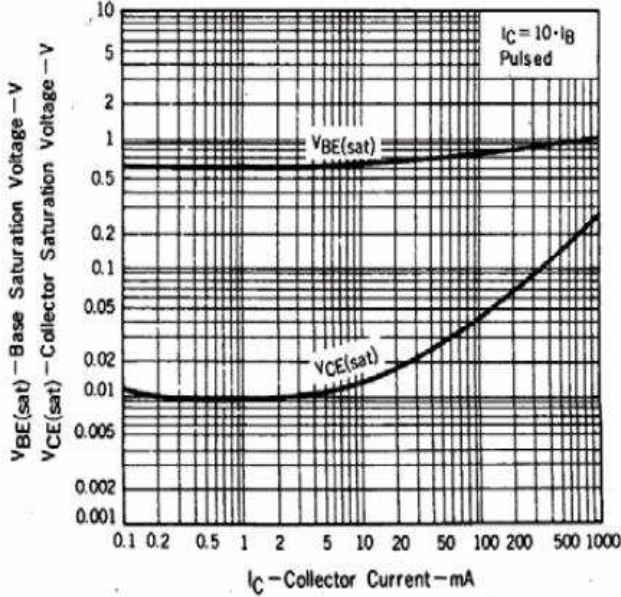
1. Pulse width $\leq 350\mu\text{s}$, Duty Cycle $\leq 2\%$.

CHARACTERISTIC CURVES

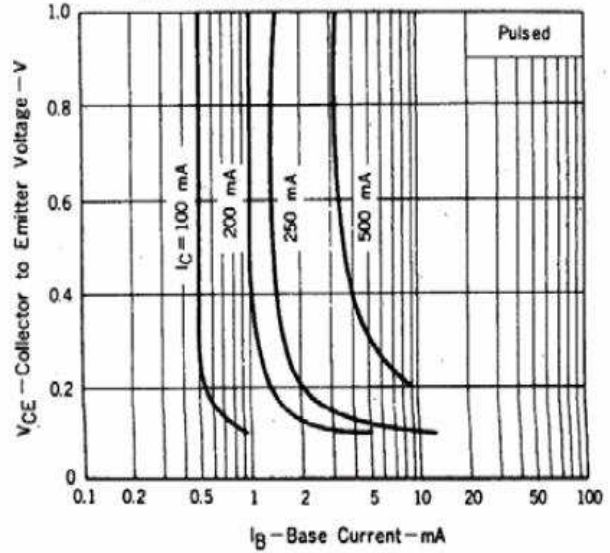


CHARACTERISTIC CURVES

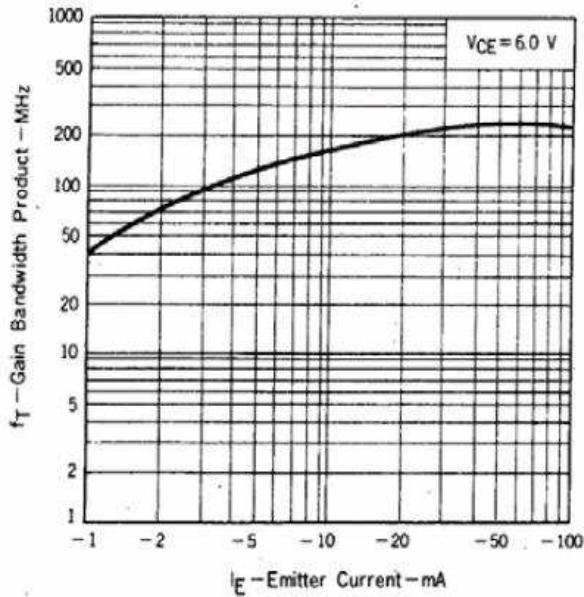
COLLECTOR AND BASE SATURATION VOLTAGE vs. COLLECTOR CURRENT



COLLECTOR TO EMITTER VOLTAGE vs. BASE CURRENT



GAIN BANDWIDTH PRODUCT vs. EMITTER CURRENT



OUTPUT CAPACITANCE vs. COLLECTOR TO BASE VOLTAGE

