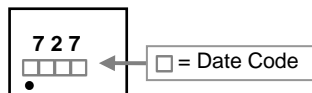


RoHS Compliant Product
A suffix of "-C" specifies halogen and lead free

FEATURES

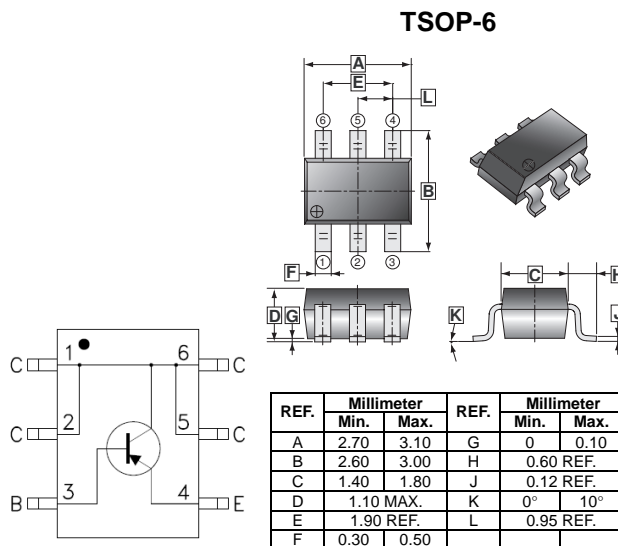
- High current output up to -3A
- Low saturation voltage

MARKING



PACKAGE INFORMATION

Package	MPQ	Leader Size
TSOP-6	3K	7' inch



ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V _{CB0}	-40	V
Collector to Emitter Voltage	V _{CEO}	-30	V
Emitter to Base Voltage	V _{EBO}	-5	V
Collector Current	I _C	-3	A
Total Power Dissipation @ T _C =25°C ³	P _D	1.2	W
Thermal Resistance Junction-ambient Max ¹	R _{θJC}	105	°C/W
Junction & Storage Temperature	T _J , T _{STG}	150, -55 ~ 150	°C

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

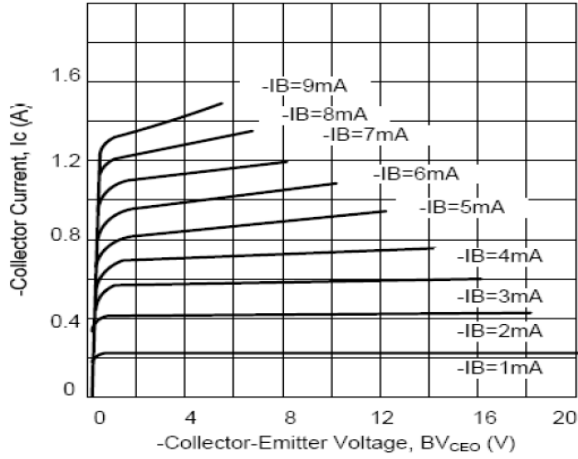
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-base breakdown voltage	V _{(BR)CBO}	-40	-	-	V	I _C = -100μA, I _E =0
Collector-emitter breakdown voltage	V _{(BR)CEO}	-30	-	-	V	I _C = -1mA, I _B =0
Emitter-base breakdown voltage	V _{(BR)EBO}	-5	-	-	V	I _E = -10μA, I _C =0
Collector cut-off current	I _{CBO}	-	-	-0.1	μA	V _{CB} = -30V, I _E =0
Emitter cut-off current	I _{EBO}	-	-	-0.1	μA	V _{EB} = -5V, I _C =0
Collector-emitter saturation voltage ²	V _{CE(sat)}	-	-0.15	-0.25	V	I _C = -0.5A, I _B = -5mA
		-	-0.85	-1		I _C = -2A, I _B = -20mA
		-	-0.25	-0.5		I _C = -2A, I _B = -200mA
Base-emitter saturation voltage ²	V _{BE(sat)}	-	-0.8	-1.1	V	I _C = -0.5A, I _B = -5mA
		-	-1	-1.5		I _C = -2A, I _B = -200mA
DC current gain ²	h _{FE}	30	-	-		V _{CE} = -2V, I _C = -20mA
		160	-	320		V _{CE} = -2V, I _C = -1A
Transition frequency	f _T	-	80	-	MHz	V _{CE} = -5V, I _C = -100mA, f=100MHz
Collector output capacitance	C _{ob}	-	55	-	pF	V _{CB} = -10V, f=1MHz

NOTE:

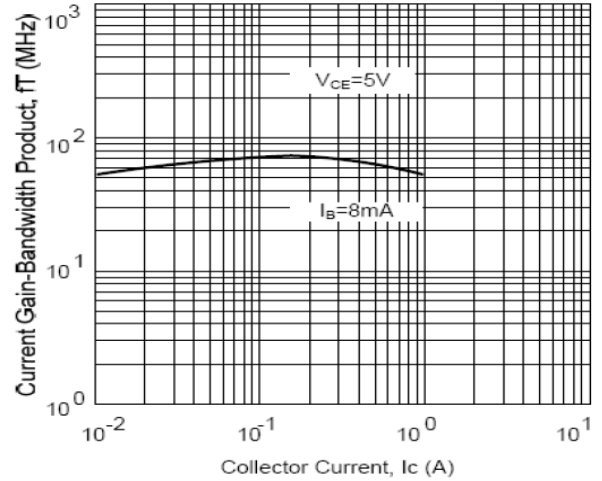
1. surface mounted on a 1 inch² FR-4 board with 2OZ copper. , 167°C/W when mounted on Min. copper pad.
2. The data tested by pulsed , pulse width ≤ 300us , duty cycle ≤ 2%
3. The power dissipation is limited by 150 °C junction temperature

CHARACTERISTIC CURVES

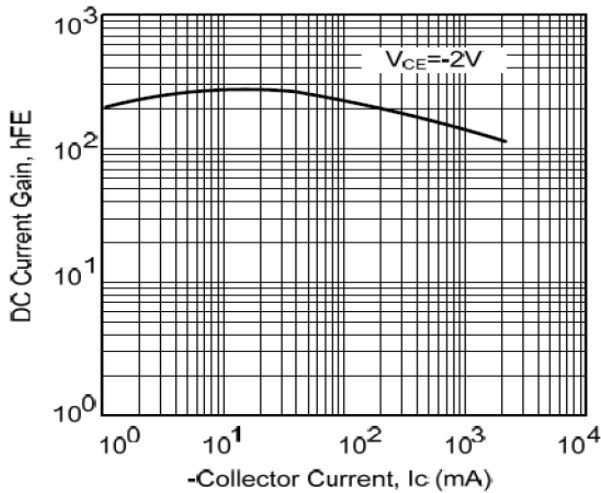
Static Characteristics



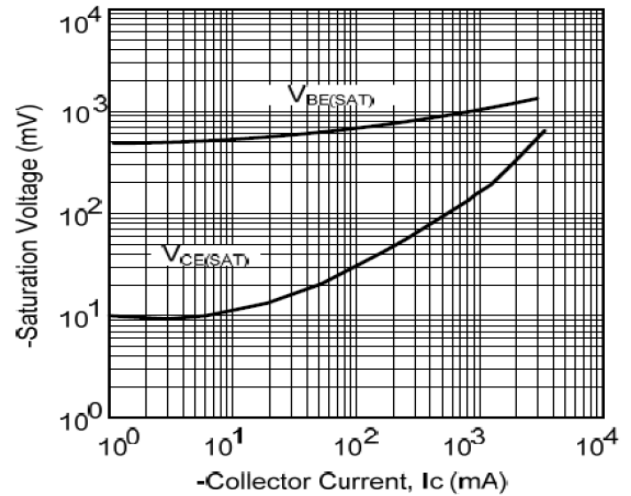
Current Gain-Bandwidth Product



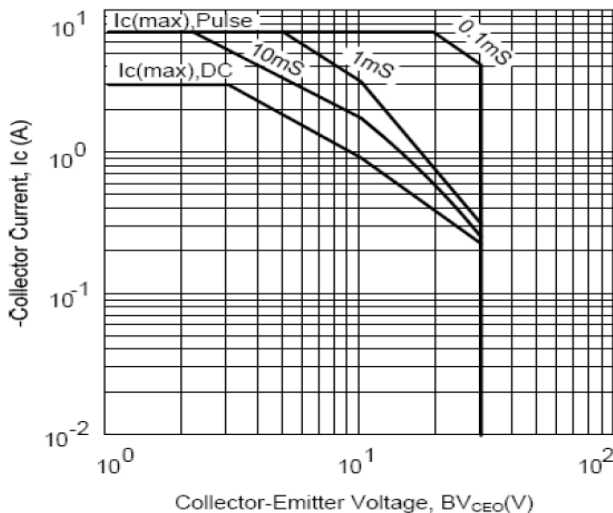
DC Current Gain



Saturation Voltage



Safe Operating Area



Power Derating

