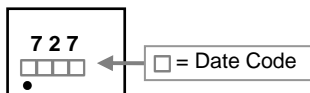


RoHS Compliant Product  
A suffix of "-C" specifies halogen and lead free

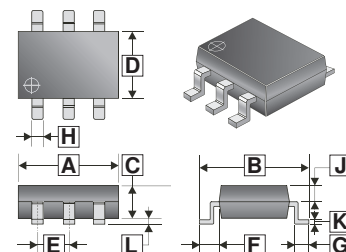
### FEATURES

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

### MARKING

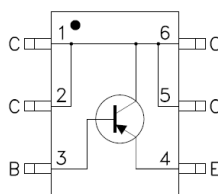


### SOT-26



### PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-26	3K	7' inch



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	3.10	G	0.37	REF.
B	2.60	3.00	H	0.30	0.55
C	1.20	REF.	J	-	-
D	1.40	1.80	K	0.12	REF.
E	0.95	REF.	L	-	0.10
F	0.60	REF.			

### ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V <sub>CBO</sub>	-40	V
Collector to Emitter Voltage	V <sub>CEO</sub>	-30	V
Emitter to Base Voltage	V <sub>EBO</sub>	-5	V
Collector Current	I <sub>C</sub>	-3	A
Total Power Dissipation @ T <sub>C</sub> =25°C <sup>3</sup>	P <sub>D</sub>	1.2	W
Thermal Resistance Junction-ambient Max <sup>1</sup>	R <sub>θJC</sub>	105	°C/W
Junction & Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	150, -55 ~ 150	°C

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise specified)

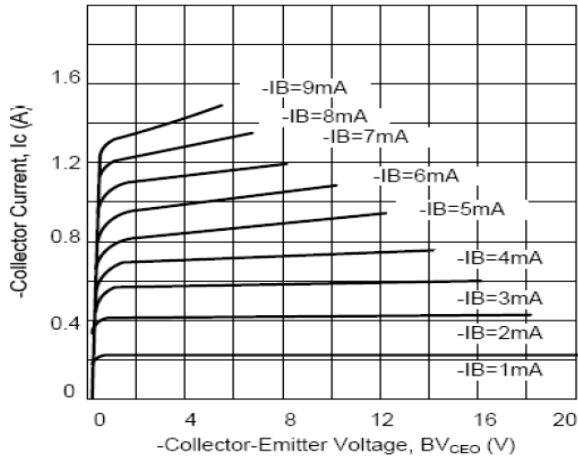
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	-40	-	-	V	I <sub>C</sub> = -100μA, I <sub>E</sub> = 0
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	-30	-	-	V	I <sub>C</sub> = -1mA, I <sub>B</sub> = 0
Emitter-base breakdown voltage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

#### NOTE:

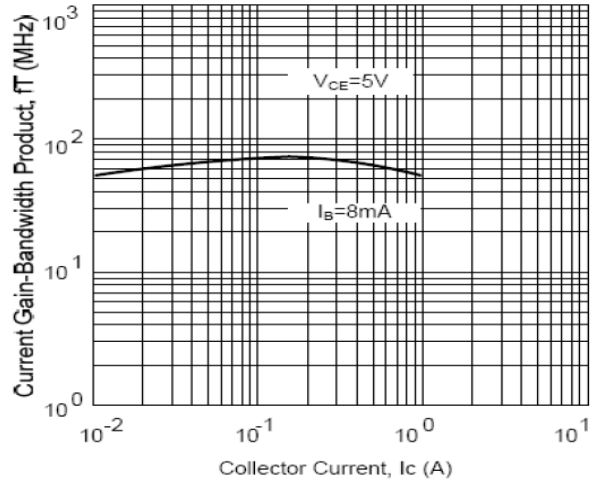
1. surface mounted on a 1 inch<sup>2</sup> FR-4 board with 2OZ copper. , 167°C/W when mounted on Min. copper pad.
2. The data tested by pulsed , pulse width ≤ 300us , duty cycle ≤ 2%
3. The power dissipation is limited by 150 °C junction temperature

**CHARACTERISTIC CURVES**

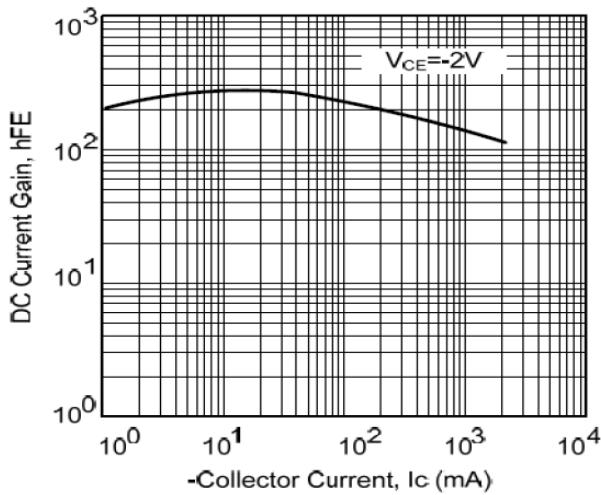
Static Characteristics



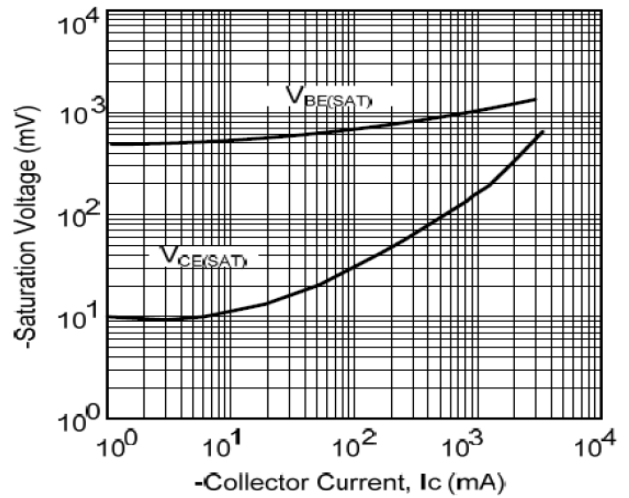
Current Gain-Bandwidth Product



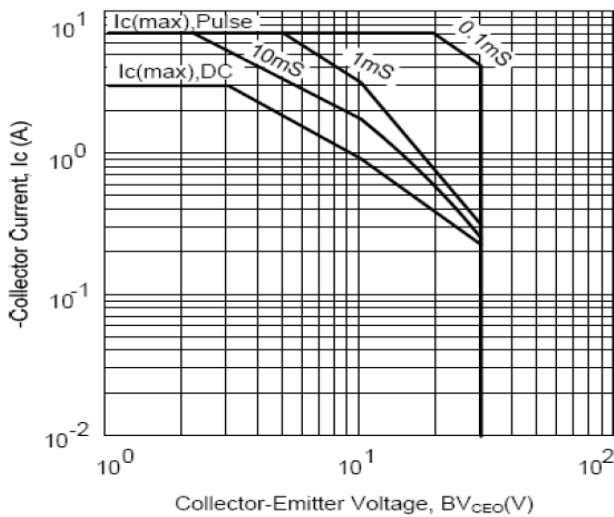
DC Current Gain



Saturation Voltage



Safe Operating Area



Power Derating

