

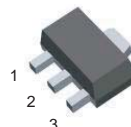
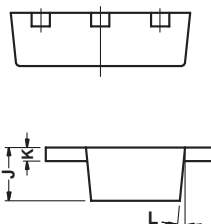
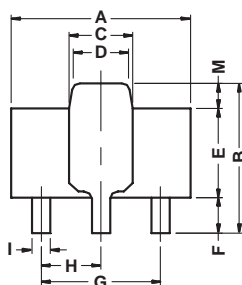
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- High transition frequency
- High power dissipation

PACKAGE DIMENSIONS

SOT-89



1. Base
2. Collector
3. Emitter

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.40	4.60	G	3.00	REF.
B	4.05	4.25	H	1.50	REF.
C	1.50	1.70	I	0.40	0.52
D	1.30	1.50	J	1.40	1.60
E	2.40	2.60	K	0.35	0.41
F	0.89	1.20	L	5° TYP.	
			M	0.70 REF.	

MARKING : AGX

X = hFE Rank Code

ABSOLUTE MAXIMUM RATINGS at Ta = 25°C

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V_{CB0}	-50	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-6	V
Collector Current -Continuous	I_C	-2	A
Collector Dissipation	P_C	0.5	W
Junction & Storage temperature	T_J, T_{STG}	150, -55~150	°C

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

PNP ELECTRICAL CHARACTERISTICS at Ta = 25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-base breakdown voltage	$V_{(BR)CBO}$	-50		-	V	$I_C = -50\mu A, I_E = 0$
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	-50		-	V	$I_C = -1mA, I_B = 0$
Emitter-base breakdown voltage	$V_{(BR)EBO}$	-6		-	V	$I_E = -50\mu A, I_C = 0$
Collector cut-off current	I_{CBO}	-		-0.1	μA	$V_{CB} = -50V, I_E = 0$
Emitter cut-off current	I_{EBO}	-		-0.1	μA	$V_{EB} = -5V, I_C = 0$
DC current gain	h_{FE}	82		270		$V_{CE} = -2V, I_C = -500mA$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-		-0.35	V	$I_C = -1A, I_B = -50mA$
Typical Transition frequency	f_T	-	200	-	MHz	$V_{CE} = -2V, I_C = -500mA, f = 100MHz$
Output Capacitance	C_{OB}		36		pF	$V_{CB} = -10V, I_E = 0, f = 1MHz$

CLASSIFICATION OF hFE2

Rank	P	Q
Range	82 - 180	120 - 270

CHARACTERISTIC CURVES

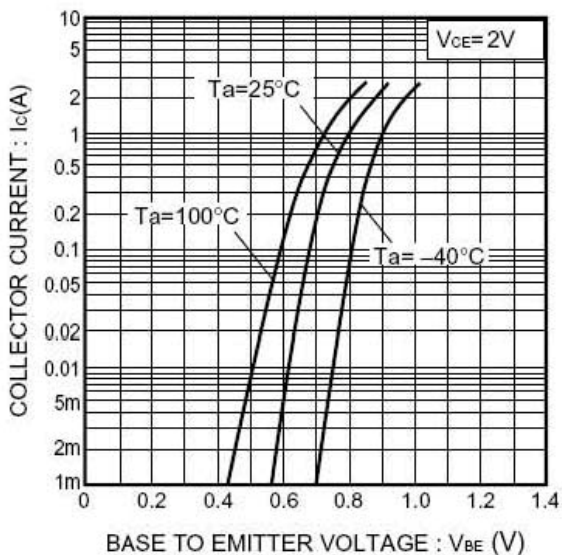


Fig.1 Grounded emitter propagation characteristics

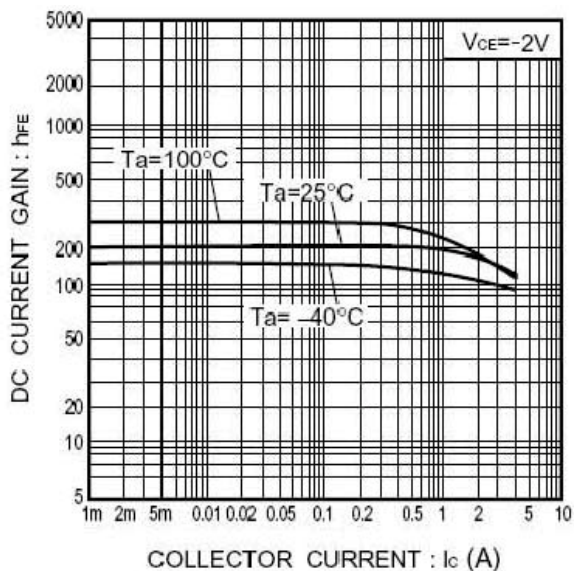


Fig.2 DC current gain vs. collector current

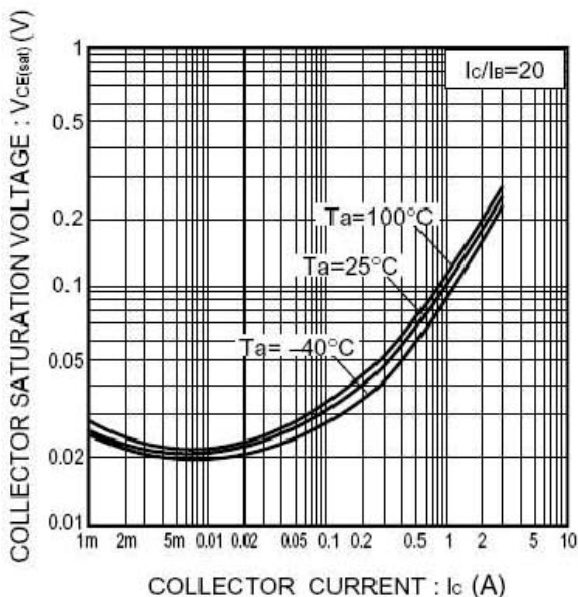


Fig.3 Collector-emitter saturation voltage vs. collector current

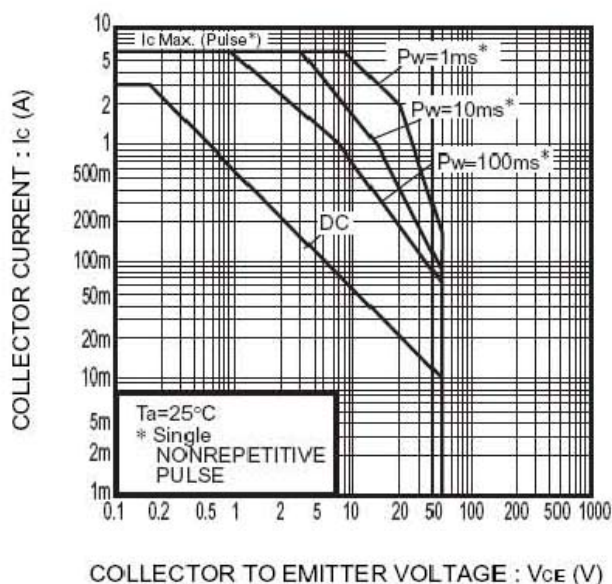


Fig.4 Safe Operating area