

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

## FEATURES

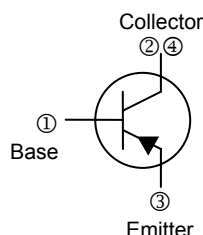
- High breakdown voltage and high current  $V_{CE0}=-80V$ ,  $I_C=-1A$
- Good  $h_{FE}$  linearity
- Complements to 2SD1898

## PACKAGE INFORMATION

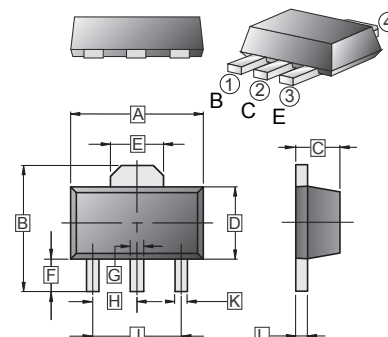
Weight: 0.05 g (approximately)

## MARKING

ZL



## SOT-89



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.40	4.60	G	0.40	0.58
B	3.94	4.25	H	1.50	TYP
C	1.40	1.60	J	3.00	TYP
D	2.30	2.60	K	0.32	0.52
E	1.50	1.70	L	0.35	0.44
F	0.89	1.20			

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

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	$V_{CBO}$	-80	V
Collector-Emitter Voltage	$V_{CEO}$	-80	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current -Continuous	$I_C$	-1	A
Collector Power Dissipation	$P_C$	0.5	W
Junction & Storage Temperature	$T_J, T_{STG}$	150, -55~150	$^\circ C$

## PNP ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ C$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-base breakdown voltage	$V_{(BR)CBO}$	-80	-	-	V	$I_C=-50\mu A, I_E=0$
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	-80	-	-	V	$I_C=-1mA, I_B=0$
Emitter-base breakdown voltage	$V_{(BR)EBO}$	-5	-	-	V	$I_E=-50\mu A, I_C=0$
Collector cut-off current	$I_{CBO}$	-	-	-1	$\mu A$	$V_{CB}=-60V, I_E=0$
Emitter cut-off current	$I_{EBO}$	-	-	-1	$\mu A$	$V_{EB}=-4V, I_C=0$
DC current gain	$h_{FE}$	82	-	390		$V_{CE}=-3V, I_C=-100mA$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	-0.4	V	$I_C=-500mA, I_B=-50mA$
Transition frequency	$f_T$	-	100	-	MHz	$V_{CE}=-5V, I_C=-50mA, f=30MHz$
Output Capacitance	$C_{OB}$	-	25	-	pF	$V_{CB}=-10V, I_E=0, f=1MHz$

## CLASSIFICATION OF $h_{FE2}$

Rank	Q	R	S
Range	82 - 180	120 - 270	180 - 390

**CHARACTERISTIC CURVES**

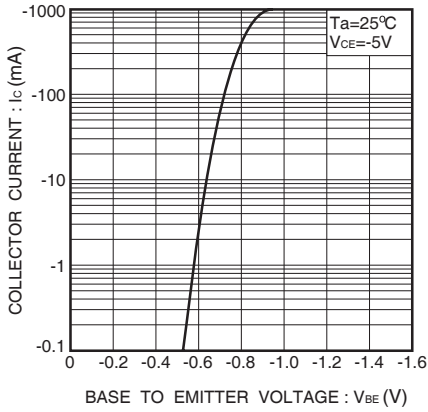


Fig.1 Grounded emitter propagation characteristics

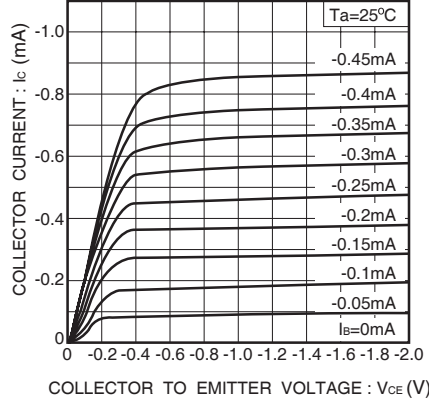


Fig.2 Grounded emitter output characteristics

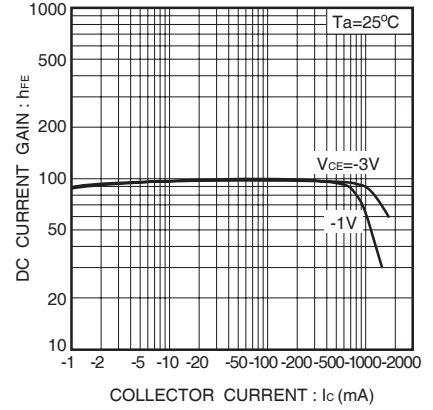


Fig.3 DC current gain vs. collector current

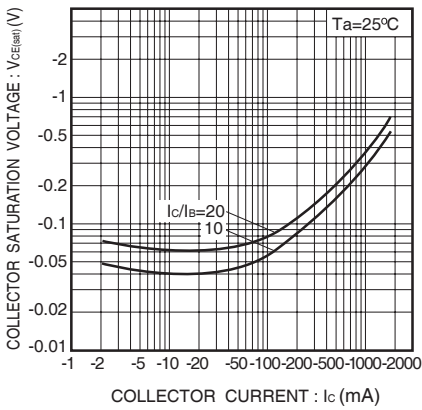


Fig.4 Collector-emitter saturation voltage vs. collector current

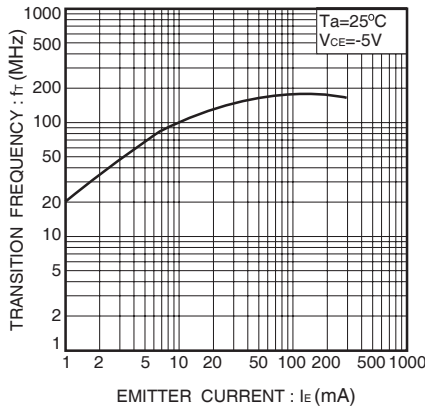


Fig.5 Gain bandwidth product vs. emitter current

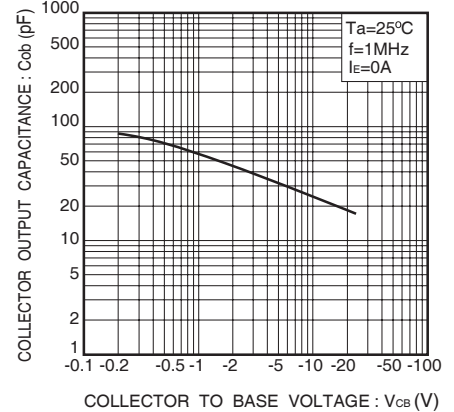


Fig.6 Collector output capacitance vs. collector-base voltage

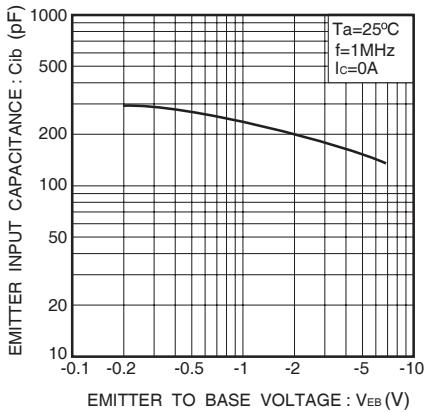


Fig.7 Emitter input capacitance vs. emitter-base voltage

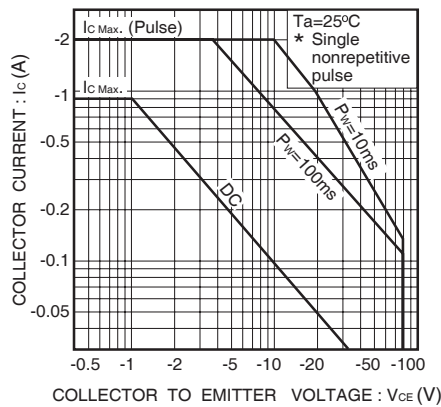


Fig.8 Safe operating area (2SB1260)