

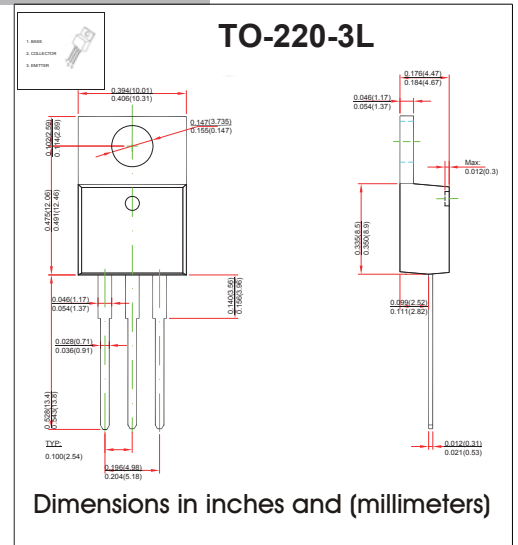
## TO-220-3L Plastic-Encapsulate Transistors

### FEATURES

- Low Frequency Power Amplifier
- Complement to 2SB834
- TRANSISTOR (NPN)

### MECHANICAL DATA

- Case style: TO-220-3L molded plastic
- Mounting position: any



### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	60	V
$V_{CEO}$	Collector-Emitter Voltage	60	V
$V_{EBO}$	Emitter-Base Voltage	7	V
$I_C$	Collector Current -Continuous	3	A
$P_C$	Collector Power Dissipation	1.5	W
$T_J$	Junction Temperature	150	°C
$T_{stg}$	Storage Temperature	-55-150	°C

#### PACKAGE INFORMATION

Device	Package	Shipping
2SD880	TO-220-3L	50/Tape&Reel

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=50mA, I_B=0$	60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	7			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=60V, I_E=0$			100	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=7V, I_C=0$			100	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=5V, I_C=500mA$	60		300	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=3A, I_B=300mA$			1	V
Base-emitter voltage	$V_{BE}$	$I_C=0.5A, V_{CE}=5V$			1	V
Transition Frequency	$f_T$	$V_{CE}=5V, I_C=500mA$		3		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$		70		pF
Turn on time	$t_{on}$	$I_{B1}=-I_{B2}=0.2A, I_C=2A$ $V_{CC}=30V, PW=20\mu s$		0.8		$\mu s$
Storage time	$t_s$			1.5		$\mu s$
Fall time	$t_f$			0.8		$\mu s$

#### CLASSIFICATION OF $h_{FE}$

Rank	O	Y	GR
Range	60-120	100-200	150-300