



Micro Commercial Components

Micro Commercial Components
 20736 Marilla Street Chatsworth
 CA 91311
 Phone: (818) 701-4933
 Fax: (818) 701-4939

2SD880
2SD880-Q
2SD880-Y
2SD880-GR

Features

- With TO-220 package
- Power amplifier applications
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CE0}	Collector-Emitter Voltage	60	V
V_{CBO}	Collector-Base Voltage	60	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current	3	A
P_C	Collector power dissipation	1.5	W
T_J	Junction Temperature	-55 to +150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Type	Max	Units
OFF CHARACTERISTICS					
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C=50\text{mA}$, $I_B=0$)	60	---	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=100\mu\text{A}$, $I_E=0$)	60	---	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=100\mu\text{A}$, $I_C=0$)	7	---	---	Vdc
I_{CBO}	Collector-Base Cutoff Current ($V_{CB}=60\text{Vdc}$, $I_E=0$)	---	---	100	μA
I_{EBO}	Emitter-Base Cutoff Current ($V_{EB}=7\text{Vdc}$, $I_C=0$)	---	---	100	μA

ON CHARACTERISTICS

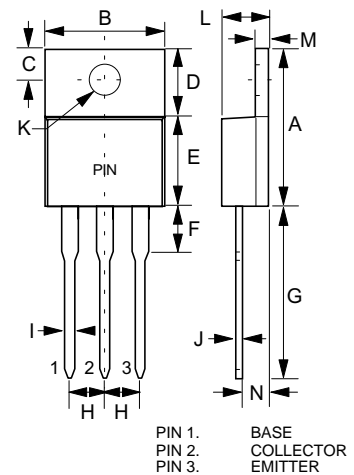
h_{FE}	Forward Current Transfer ratio ($I_C=500\text{mA}$, $V_{CE}=5\text{Vdc}$)	60	---	300	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=3\text{A}$, $I_B=300\text{mA}$)	---	---	1	Vdc
V_{BE}	Base-Emitter Voltage ($I_C=0.5\text{A}$, $V_{CE}=5\text{Vdc}$)	---	---	1	Vdc
f_T	Transistor Frequency ($I_C=500\text{mA}$, $V_{CE}=5\text{Vdc}$)	---	3	---	MHz
C_{ob}	Collector Output Capacitance ($V_{CB}=10\text{Vdc}$, $I_E=0$, $f=1\text{MHz}$)	---	70	---	pF
t_{on}	Turn on time	---	0.8	---	μs
t_s	Storage time	---	1.5	---	μs
t_f	Fall time	---	0.8	---	μs

Classification Of h_{FE}

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

NPN Silicon
Power Transistors

TO-220



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.100	.135	2.54	3.43	
D	.230	.270	5.84	6.86	
E	.380	.420	9.65	10.67	
F	----	.250	----	6.35	
G	.500	.580	12.70	14.73	
H	.090	.110	2.29	2.79	
I	.020	.045	0.51	1.14	
J	.012	.025	0.30	0.64	
K	.139	.161	3.53	4.09	∅
L	.140	.190	3.56	4.83	
M	.045	.055	1.14	1.40	
N	.080	.115	2.03	2.92	



TM

Micro Commercial Components

*****IMPORTANT NOTICE*****

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. *Micro Commercial Components Corp.* does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp.* and all the companies whose products are represented on our website, harmless against all damages.

*****APPLICATIONS DISCLAIMER*****

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.