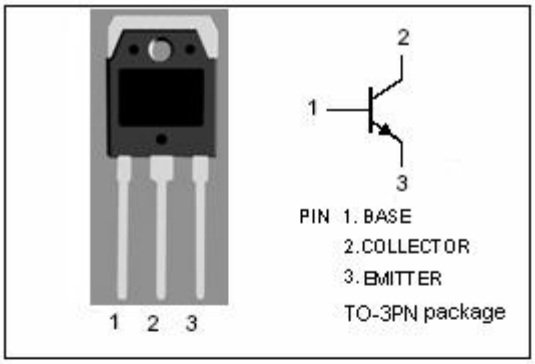
isc Silicon NPN Power Transistor 2SC3855

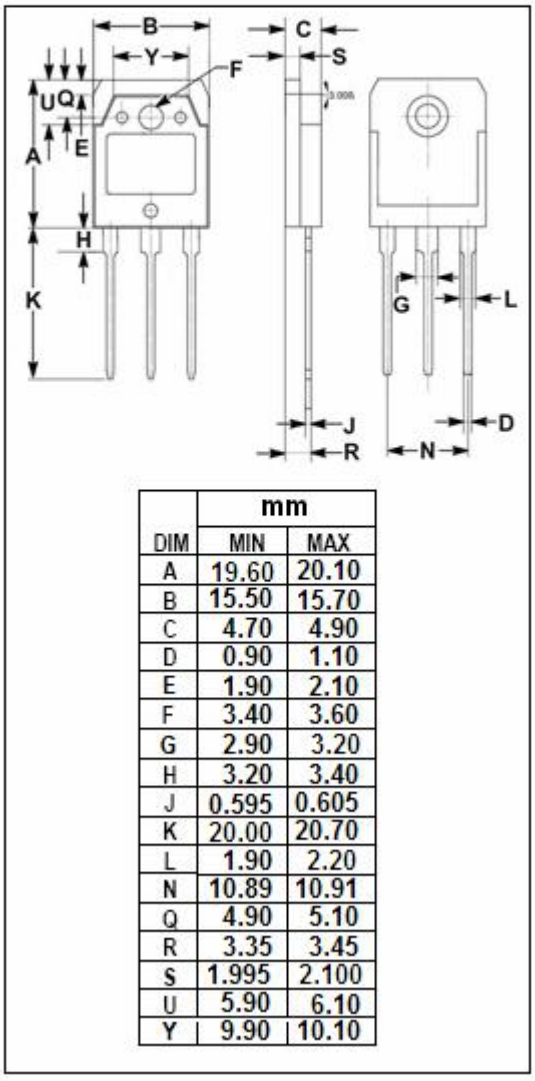


DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 140V(Min)
- DC Current Gain-
  : h_{FE}= 50(Min)@ I_C= 3A
- Complement to Type 2SA1491
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for audio and general purpose applications.



DIM	mm MIN	mm MAX
A	19.60	20.10
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.20
H	3.20	3.40
J	0.595	0.605
K	20.00	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.10
Y	9.90	10.10

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	140	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	10	A
I_B	Base Current-Continuous	4	A
P_C	Collector Power Dissipation @T_C=25℃	100	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

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ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 50mA; I_B= 0	140			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 5A; I_B= 0.5A			2.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 200V; I_E= 0			100	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 6V; I_C= 0			100	μA
h_{FE}	DC Current Gain	I_C= 3A; V_{CE}= 4V	50			
f_T	Current-Gain—Bandwidth Product	I_E= -0.5A; V_{CE}= 12V		20		MHz
Switching Times						
t_{on}	Turn-On Time	I_C= 5A; I_{B1}= -I_{B2}= 0.5A; V_{CC}= 60V; R_L= 12Ω		0.3		μs
t_{stg}	Storage Time			2.4		μs
t_f	Fall Time			0.4		μs