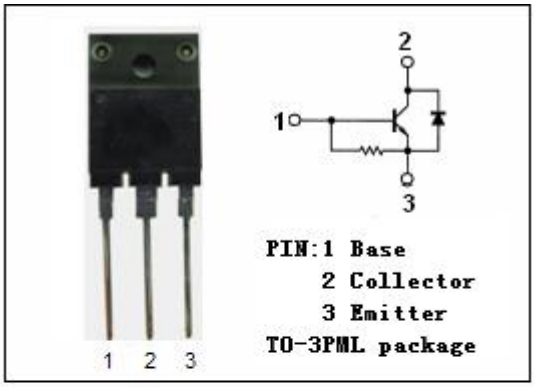
isc Silicon PNP Darlington Power Transistor 2SB1588

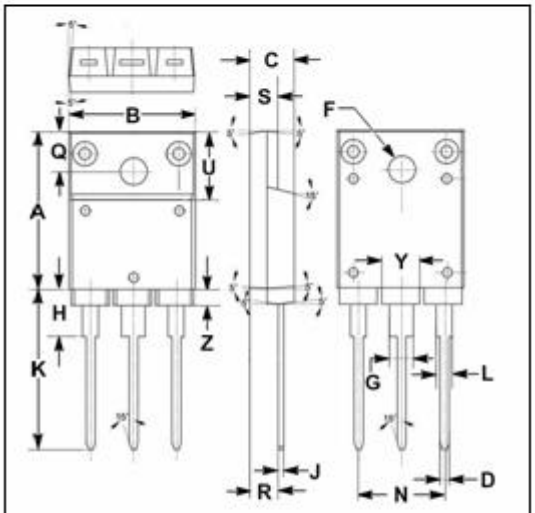


DESCRIPTION

- High DC Current Gain-
  : h_{FE}= 5000(Min)@I_C= -7A
- Low-Collector Saturation Voltage-
  : $V_{CE(sat)}$= -2.5V(Max.)@I_C= -7A
- Complement to Type 2SD2439
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for audio, series regulator and general purpose applications.



DIM	mm MIN	mm MAX
A	19.90	20.10
B	15.75	16.10
C	5.50	5.70
D	0.90	1.10
F	3.30	3.50
G	2.90	3.20
H	5.90	6.10
J	0.595	0.70
K	21.10	22.50
L	1.90	2.25
N	10.80	11.00
Q	4.90	5.10
R	3.75	3.95
S	3.20	3.60
U	9.90	10.10
Y	4.20	4.90
Z	1.90	2.10

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-160	V
V_{CEO}	Collector-Emitter Voltage	-150	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-10	A
I_B	Base Current- Continuous	-1	A
P_C	Collector Power Dissipation @ T_C=25℃	80	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= -30mA; I_B= 0	-150			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -7A; I_B= -7mA			-2.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= -7A; I_B= -7mA			-3.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -160V; I_E= 0			-100	μA
h_{FE}	DC Current Gain	I_C= -7A; V_{CE}= -4V	5000		30000	
C_{OB}	Collector Output Capacitance	I_E= 0; V_{CB}= -10V; f= 1MHz		230		pF
f_T	Current-Gain—Bandwidth Product	I_c= -2A; V_{CE}= -12V		50		MHz

◆ **h_{FE} Classifications**

O	P	Y
5000-12000	6500-20000	15000-30000