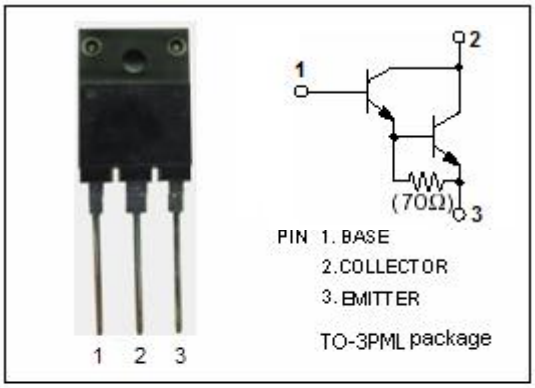
isc Silicon NPN Darlington Power Transistor 2SD2558



DESCRIPTION

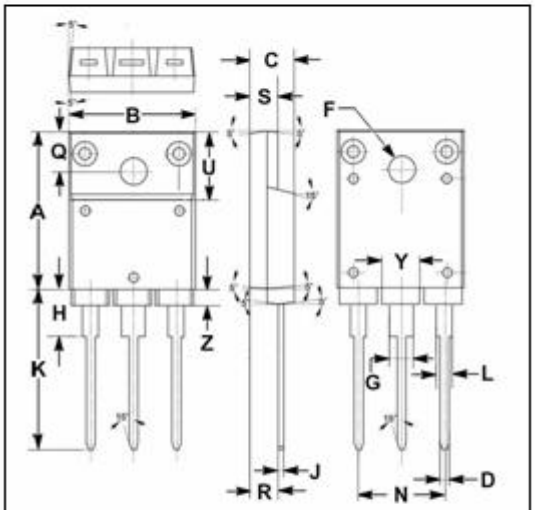
- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 200V(Min)
- High DC Current Gain-
  : h_{FE}= 1500(Min.) @(I_C= 1A, V_{CE}= 5V)
- Low Collector Saturation Voltage-
  : $V_{CE(sat)}$= 1.5V(Max)@ (I_C= 1A, I_B= 5mA)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for series regulator and general purpose applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	200	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	5	A
I_B	Base Current-Continuous	2	A
P_C	Collector Power Dissipation @T_C=25℃	60	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃



DIM	mm MIN	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

isc Silicon NPN Darlington Power Transistor 2SD2558

ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 10mA, I_B= 0	200			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 1A ,I_B= 5mA			1.5	V
I_{CBO}	Collector Cutoff current	V_{CB}= 200V, I_E= 0			0.1	mA
I_{EBO}	Emitter Cutoff current	V_{EB}= 6V, I_C= 0			5.0	mA
h_{FE}	DC Current Gain	I_C= 1A; V_{CE}= 5V	1500		6500	
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 10V; f_{test}= 1MHz		110		pF
f_T	Current-Gain—Bandwidth Product	I_E= -0.5A; V_{CE}= 10V		15		MHz