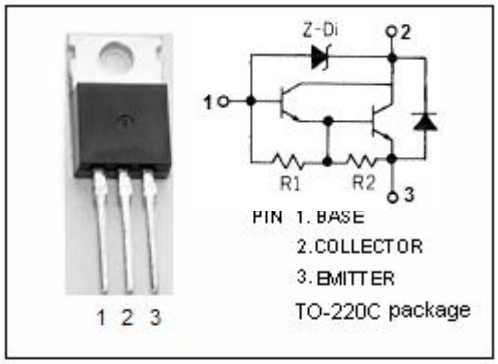
isc Silicon NPN Darlington Power Transistor 2SD1647

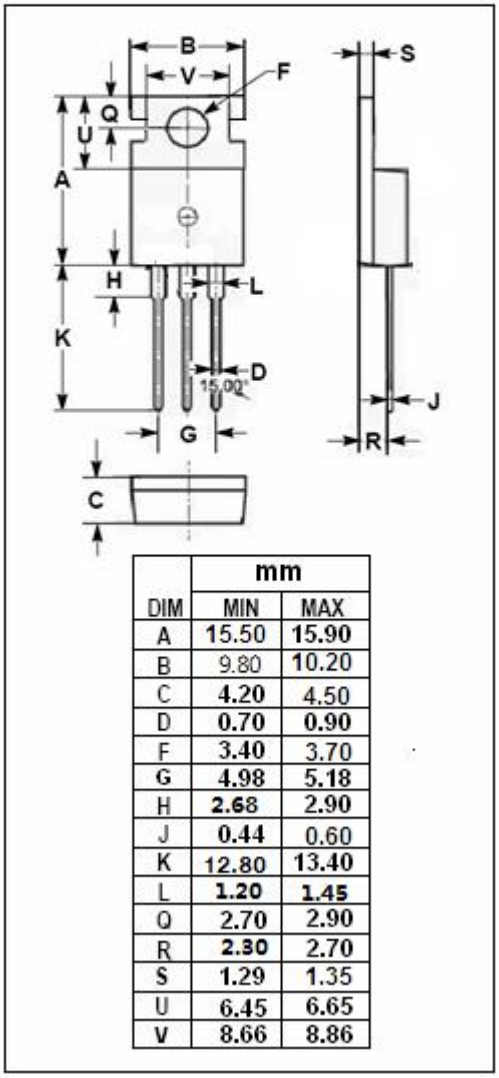
DESCRIPTION

- Low Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$ = 1.5V(Max)@ I_C= 1A
- High DC Current Gain
  : h_{FE}= 1000(Min) @I_C= 1.0A
- Low Saturation Voltage
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Designed for general purpose amplifier and low frequency power Amp applications.



DIM	mm MIN	mm MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	50-70	V
V_{CEO}	Collector-Emitter Voltage	50-70	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	2	A
I_{CP}	Collector Current-Peak	3	A
P_C	Collector Power Dissipation @ T_C=25℃	25	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
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 5mA, I_B= 0	50		70	V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 100 μ A, I_E= 0	50		70	V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 1A, I_B= 1mA			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 50V, I_E= 0			10	uA
I_{CEO}	Collector Cutoff Current	V_{CE}= 50V, I_B= 0			1.0	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			3.0	mA
h_{FE-1}	DC Current Gain	I_C= 1A; V_{CE}= 2V	1000		10000	
C_{OB}	Output Capacitance	I_E= 0 ; V_{CB}= 10V,f_{test}= 1MHz		25		pF