

isc Silicon NPN Darlington Power Transistor
2SD2557
DESCRIPTION

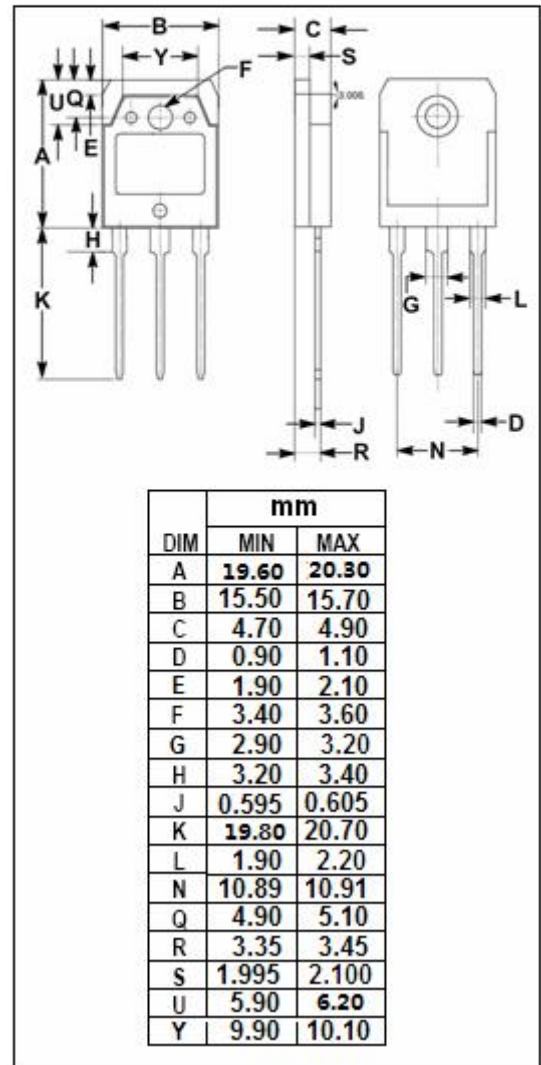
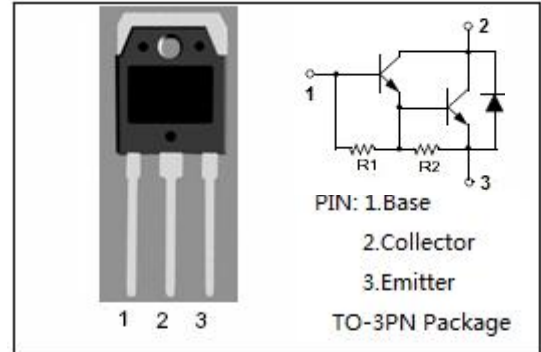
- High DC Current Gain
: $h_{FE} = 1500(\text{Min.}) @ I_C = 1A, V_{CE} = 5V$
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 200V(\text{Min})$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for series regulator and general purpose applications.

ABSOLUTE MAXIMUM RATINGS($T_a = 25^\circ\text{C}$)

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 @ $T_C = 25^\circ\text{C}$	70	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Darlington Power Transistor**2SD2557****ELECTRICAL CHARACTERISTICS**T_c=25°C 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

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