

isc Silicon NPN Darlington Power Transistor

2SD1532

DESCRIPTION

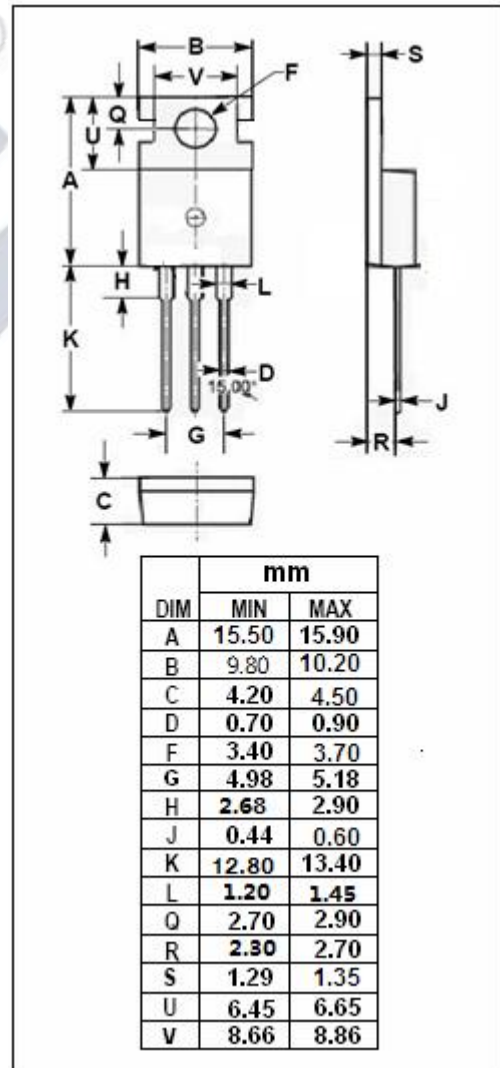
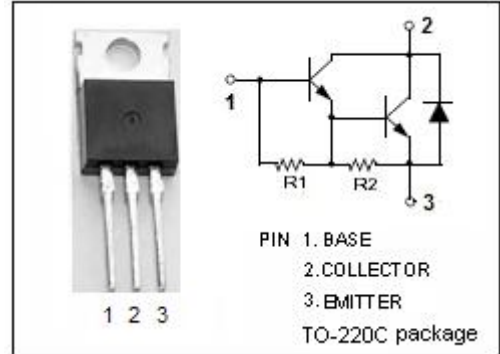
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 120V(\text{Min})$
- High DC Current Gain
: $h_{FE} = 1000(\text{Min}) @ I_C = 2A, V_{CE} = 4V$
- Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for general purpose amplifier and low speed switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	120	V
V_{CEO}	Collector-Emitter Voltage	120	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	4	A
I_{CM}	Collector Current-Peak	8	A
I_B	Base Current	120	mA
P_C	Collector Power Dissipation $T_c=25^\circ\text{C}$	30	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$



isc Silicon NPN Darlington Power Transistor**2SD1532****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _c = 30mA, I _B = 0	120			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 2mA, I _C = 0	5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 3A, I _B = 12mA			2.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 3.0A ; V _{CE} = 3V			2.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 120V, I _E = 0			0.1	mA
I _{CEO}	Collector Cutoff Current	V _{CE} = 120V, I _B = 0			0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			2	mA
h _{FE-1}	DC Current Gain	I _C = 0.5A ; V _{CE} = 4V	1000			
h _{FE-2}	DC Current Gain	I _C = 2A ; V _{CE} = 4V	1000			