

isc Silicon NPN Darlington Power Transistor

2SD2162

DESCRIPTION

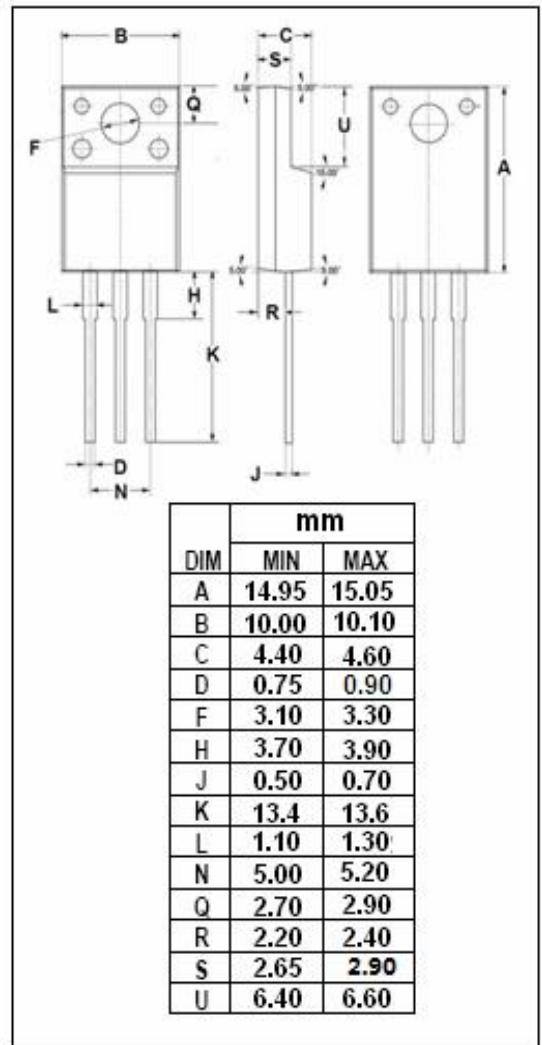
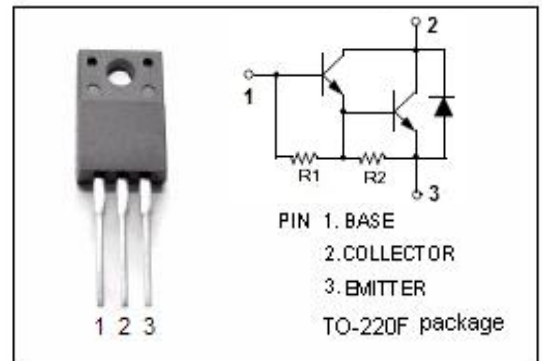
- High hFE due to Darlington connection
: $H_{FE} \geq 2,000$ @ ($V_{CE} = 2.0\text{ V}$, $I_C = 3.0\text{ A}$)
- Low Collector Saturation Voltage-
: $V_{CE(sat)} \leq 1.5\text{ V}$ @ ($I_C = 3\text{ A}$, $I_B = 3\text{ mA}$)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for low-frequency power amplifiers and low-speed switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	150	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-Peak	8	A
I_B	Base Current-Continuous	0.8	A
P_C	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	2	W
	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	25	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~150	$^\circ\text{C}$



isc Silicon NPN Darlington Power Transistor**2SD2162****ELECTRICAL CHARACTERISTICS****T_j=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 3A; I _B = 3mA			1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 3A; I _B = 3mA			2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 100V; I _E = 0			1.0	μ A
h _{FE-1}	DC Current Gain	I _C = 3A; V _{CE} = 2V	2000		15000	
h _{FE-2}	DC Current Gain	I _C = 5A; V _{CE} = 2V	500			

◆ h_{FE-1} Classifications

M	L	K
2000-5000	3000-7000	5000-15000

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