

isc Silicon NPN Darlington Power Transistor**2SD2081****DESCRIPTION**

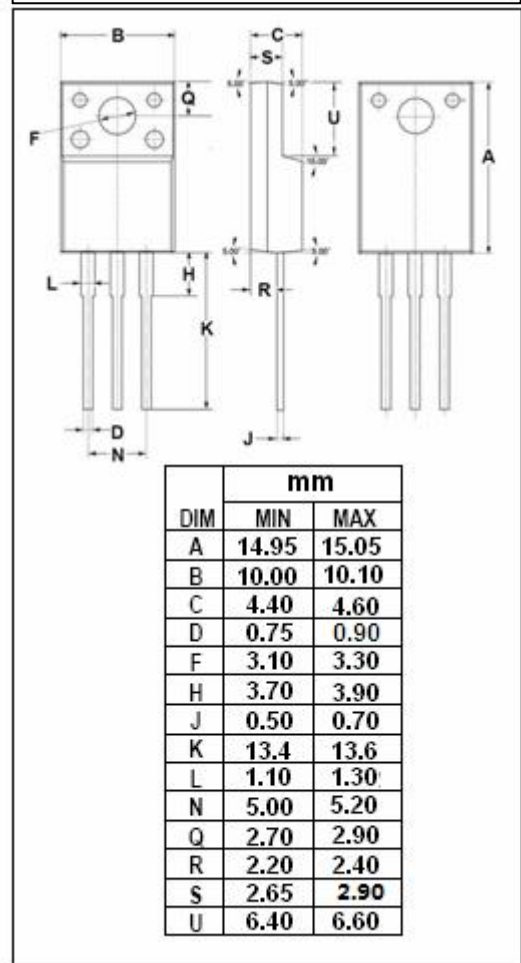
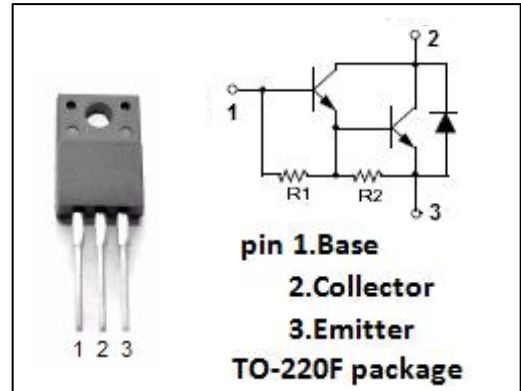
- High DC Current Gain-
: $h_{FE} = 2000(\text{Min}) @ I_C = 5A$
- Low-Collector Saturation Voltage-
: $V_{CE(\text{sat})} = 1.5V(\text{Max.}) @ I_C = 5A$
- Complement to Type 2SB1259
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for audio, series regulator and general purpose 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	6	V
I_C	Collector Current-Continuous	10	A
I_B	Base Current- Continuous	1	A
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	-55~150	$^\circ\text{C}$



isc Silicon NPN Darlington Power Transistor**2SD2081****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	120			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 5A; I _B = 5mA			1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 5A; I _B = 5mA			2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 120V; I _E = 0			10	μA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 6V; I _C = 0			10	mA
h _{FE}	DC Current Gain	I _C = 5A; V _{CE} = 4V	2000			

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