

isc Silicon NPN Darlington Power Transistor

2SD2256

DESCRIPTION

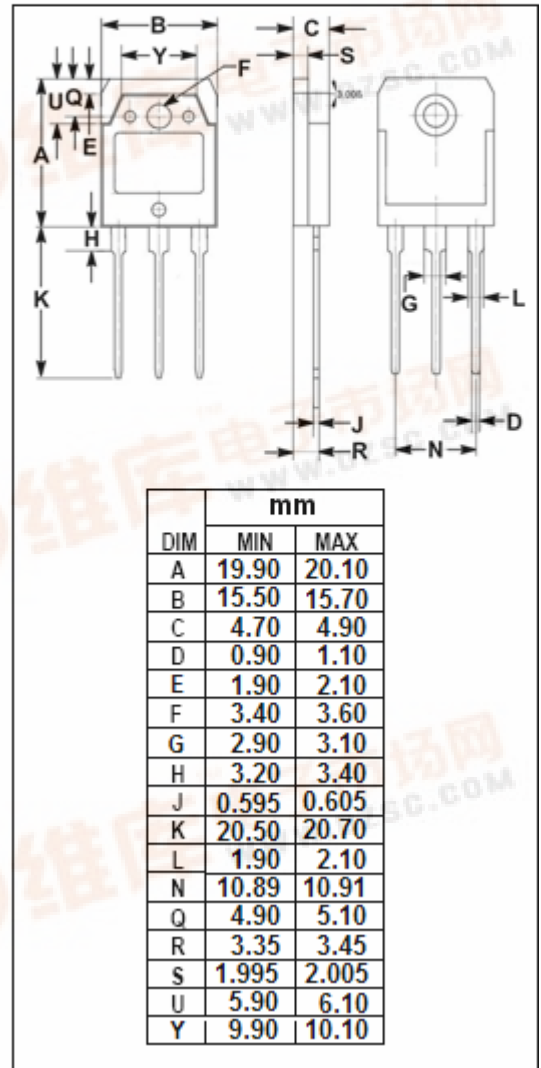
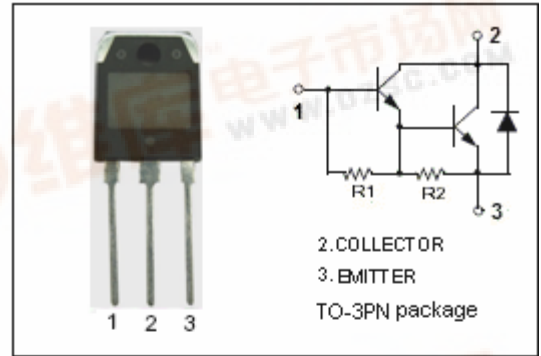
- High DC Current Gain
: $h_{FE} = 2000(\text{Min.}) @ I_C = 12A, V_{CE} = 4V$
- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 120V(\text{Min})$

APPLICATIONS

- Designed for low frequency power amplifier 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	7	V
I_C	Collector Current-Continuous	25	A
I_{CM}	Collector Current-Peak	35	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	120	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**2SD2256****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=200\text{mA}$, $R_{BE}=\infty$	120			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C=0.1\text{mA}$, $I_E=0$	120			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=25\text{mA}$, $R_{BE}=\infty$	120			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=50\text{mA}$, $I_C=0$	7			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C=12\text{A}$, $I_B=24\text{mA}$			2.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C=25\text{A}$, $I_B=250\text{mA}$			3.5	V
$V_{BE(sat)-1}$	Base-Emitter Saturation Voltage	$I_C=12\text{A}$, $I_B=24\text{mA}$			3.0	V
$V_{BE(sat)-2}$	Base-Emitter Saturation Voltage	$I_C=25\text{A}$, $I_B=250\text{mA}$			4.5	V
I_{CBO}	Collector Cutoff current	$V_{CB}=\text{100V}$, $I_E=0$			10	μA
I_{CEO}	Collector Cutoff current	$V_{CE}=\text{100V}$, $R_{BE}=\infty$			10	μA
h_{FE-1}	DC Current Gain	$I_C=12\text{A}$; $V_{CE}=4\text{V}$	2000		20000	
h_{FE-2}	DC Current Gain	$I_C=25\text{A}$; $V_{CE}=4\text{V}$	500			