

isc Silicon NPN Power Transistor
2SD2396
DESCRIPTION

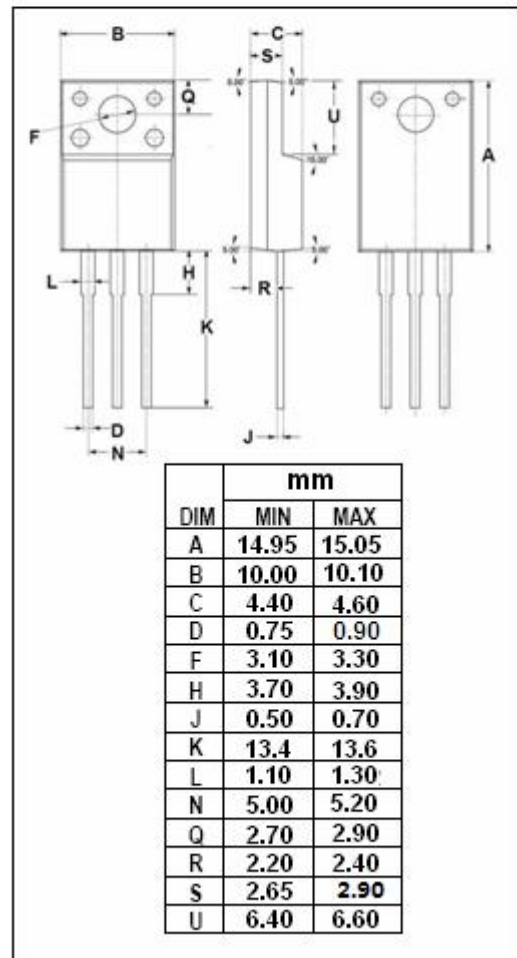
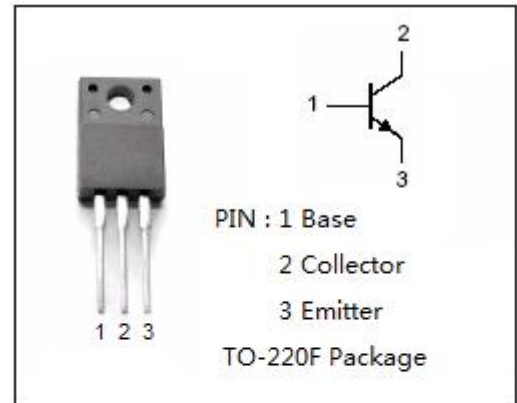
- Low Collector Saturation Voltage
- High DC current gain
- Large collector power dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for low frequency power amplifier

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	80	V
V _{CEO}	Collector-Emitter Voltage	60	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current-Continuous	3	A
I _{CM}	Collector Current-Pulse	6	A
P _C	Collector Power Dissipation @ T _C =25°C	30	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~150	°C



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ELECTRICAL CHARACTERISTICS
 $T_c=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=1\text{mA}; I_B=0$	60			V
$V_{CE(sat)^*}$	Collector-Emitter Saturation Voltage	$I_C=2\text{A}; I_B=0.05\text{A}$			0.8	V
$V_{BE(sat)^*}$	Base-Emitter Saturation Voltage	$I_C=2\text{A}; I_B=0.05\text{A}$			1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=60\text{V}; I_E=0$			1	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=6\text{V}; I_C=0$			1	μA
h_{FE}^*	DC Current Gain	$I_C=0.5\text{A}; V_{CE}=4\text{V}$	400		2K	
f_T	Current-Gain—Bandwidth Product	$I_E=0.2\text{A}; V_{CE}=5\text{V}$		40		MHz
C_{OB}	Output Capacitance	$I_E=0; V_{CB}=10\text{V}; f_{test}=1.0\text{MHz}$		55		pF

*:Single pulse test

◆ h_{FE} Classification

Class	H	J	K
h_{FE}	400-800	600-1200	1K-2K

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