

isc Silicon NPN Power Transistor

2SD718

DESCRIPTION

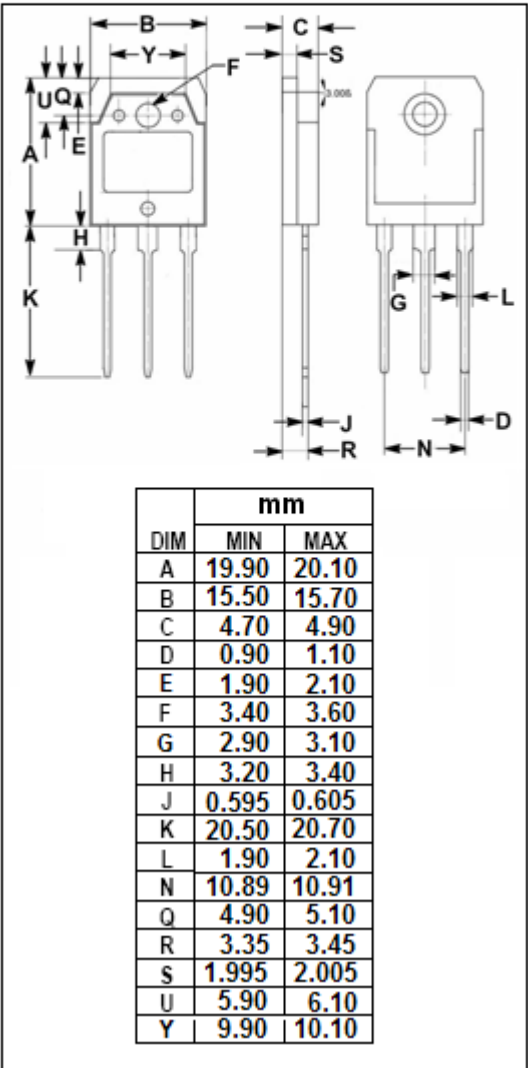
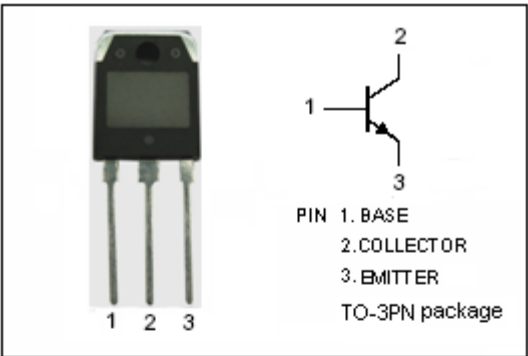
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 120V(\text{Min})$
- Good Linearity of h_{FE}
- Complement to Type 2SB688

APPLICATIONS

- Audio frequency power amplifier applications
- Recommend for 45-50W audio frequency amplifier output stage applications

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

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	8	A
I_B	Base Current-Continuous	0.8	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}C$	80	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



isc Silicon NPN Power Transistor**2SD718****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

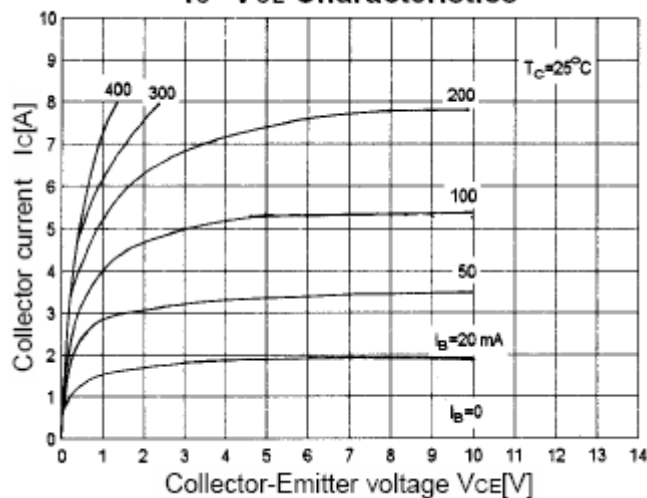
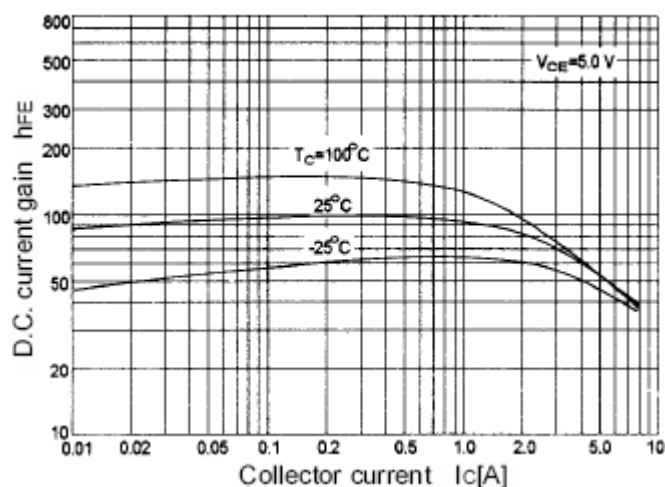
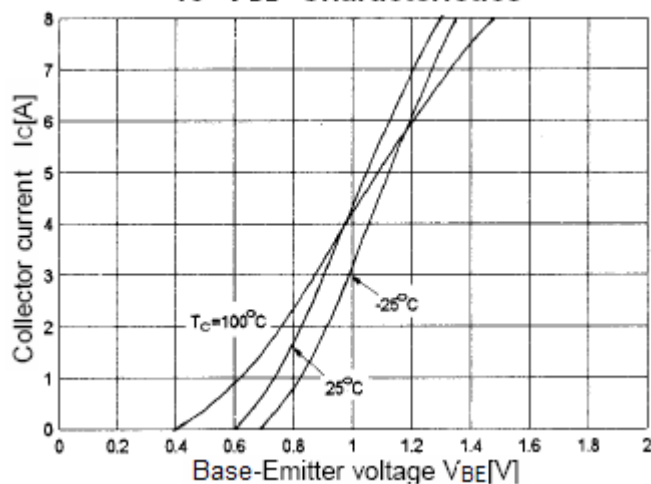
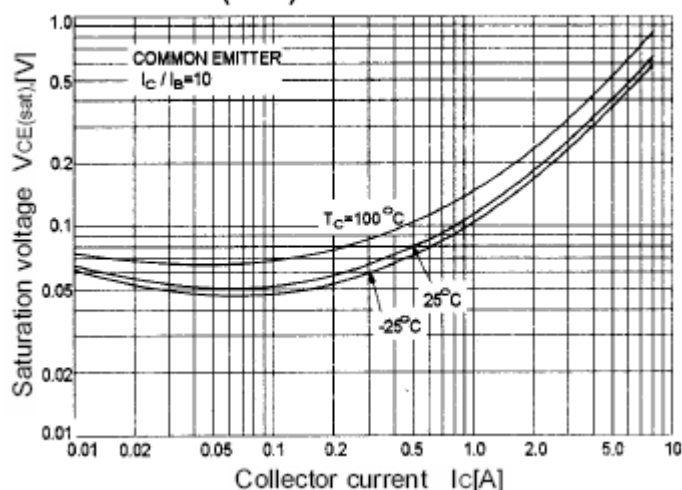
SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=50\text{mA}$; $I_B=0$	120			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=5.0\text{A}$; $I_B=0.5\text{A}$			2.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C=5\text{A}$; $V_{CE}=5\text{V}$			1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=120\text{V}$; $I_E=0$			10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5\text{V}$; $I_C=0$			10	μA
h_{FE}	DC Current Gain	$I_C=1\text{A}$; $V_{CE}=5\text{V}$	55		160	
C_{OB}	Output Capacitance	$I_E=0$; $V_{CB}=10\text{V}$; $f_{test}=1.0\text{MHz}$		170		pF
f_T	Current-Gain—Bandwidth Product	$I_C=1\text{A}$; $V_{CE}=5\text{V}$; $f_{test}=1.0\text{MHz}$		12		MHz

◆ **h_{FE} Classifications**

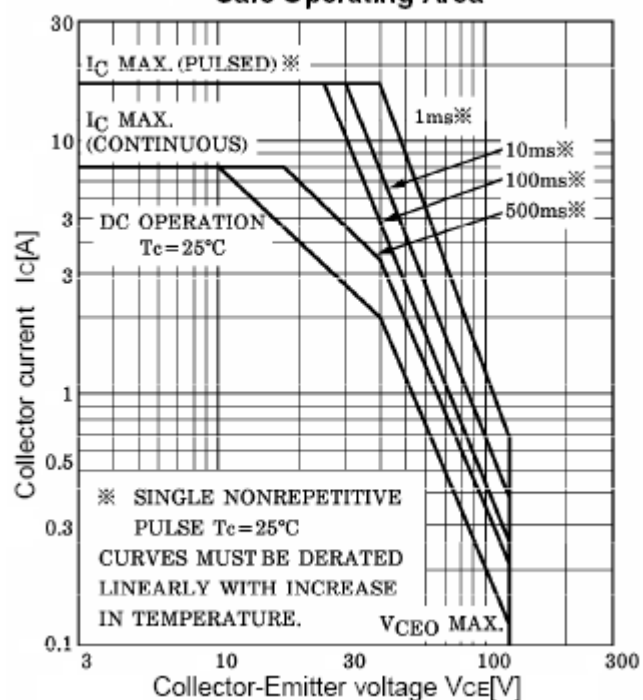
R	O
55-110	80-160

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 I_C - V_{CE} Characteristics h_{FE} - I_C Characteristics I_C - V_{BE} Characteristics $V_{CE(sat)}$ - I_C Characteristics

Safe Operating Area



Power Derating

