



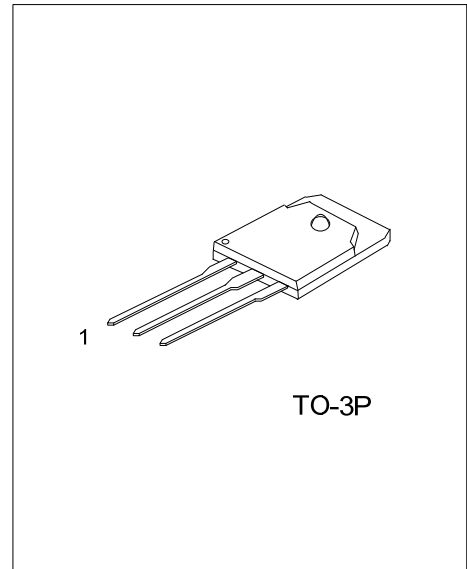
# 2SD718

## NPN EPITAXIAL SILICON TRANSISTOR

### HIGH POWER AMPLIFIER APPLICATION

■ FEATURES

- \* Recommended for 45~50W Audio Frequency Amplifier Output Stage.
- \* Complementary to 2SB688.



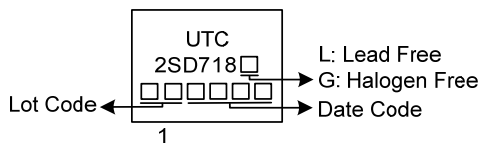
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SD718L-x-T3P-T	2SD718G-x-T3P-T	TO-3P	B	C	E	Tube

Note: Pin Assignment: B: Base C: Collector E: Emitter

<p>2SD718G-x-T3P-T</p>	<p>(1) T: Tube                  (2) T3P: TO-3P                  (3) x: refer to Classification of <math>h_{FE}</math>                  (4) G: Halogen Free and Lead Free, L: Lead Free</p>
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■ MARKING



■ ABSOLUTE MAXIMUM RATING ( $T_A=25^\circ\text{C}$ , unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	$V_{CBO}$	120	V
Collector-Emitter Voltage	$V_{CEO}$	120	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	10	A
Base Current	$I_B$	1	A
Collector Power Dissipation ( $T_c=25^\circ\text{C}$ )	$P_C$	80	W
Junction Temperature	$T_J$	+150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 ~ +150	$^\circ\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

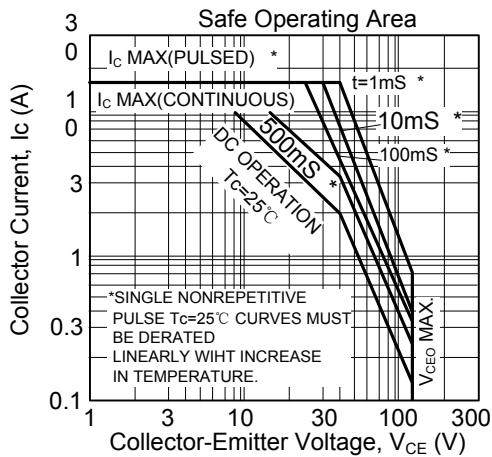
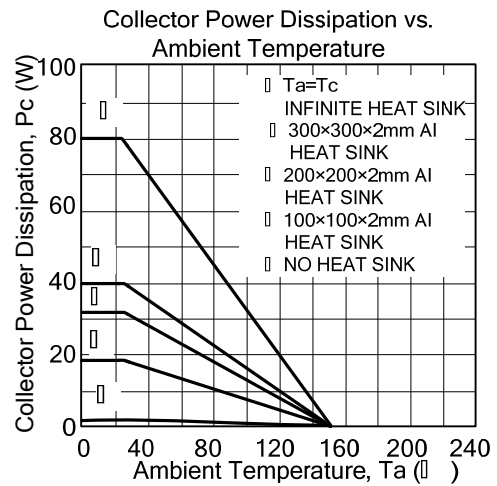
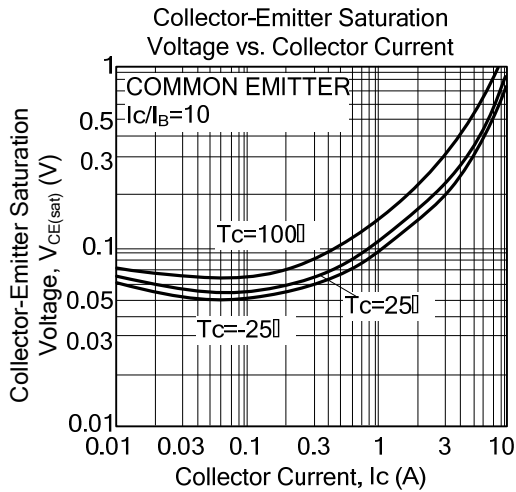
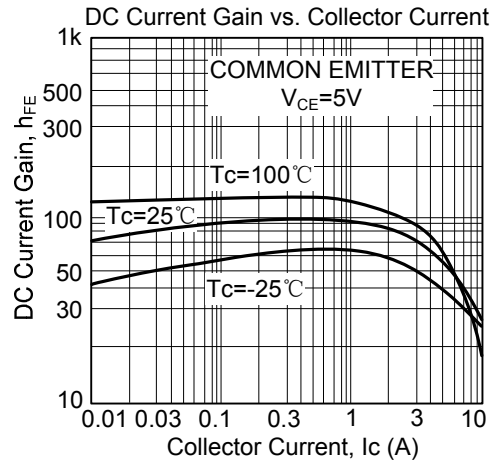
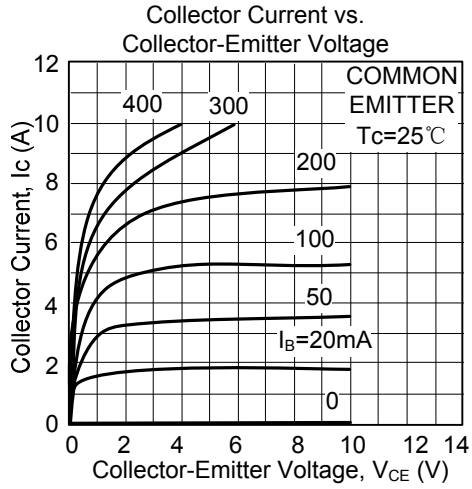
■ ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ , unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=50\text{mA}$ , $I_B=0$	120			V
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=120\text{V}$ , $I_E=0$			10	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=5\text{V}$ , $I_C=0$			10	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE}=5\text{V}$ , $I_C=1\text{A}$	55		160	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=6\text{A}$ , $I_B=0.6\text{A}$			2.0	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE}=5\text{V}$ , $I_C=5\text{A}$			1.5	V
Transition Frequency	$f_T$	$V_{CE}=5\text{V}$ , $I_C=1\text{A}$		12		MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10\text{V}$ , $I_E=0$ , $f=1\text{MHz}$		170		pF

■ CLASSIFICATION OF  $h_{FE}$

RANK	R	O
RANGE	55 ~ 110	80 ~ 160

## TYPICAL CHARACTERISTICS



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