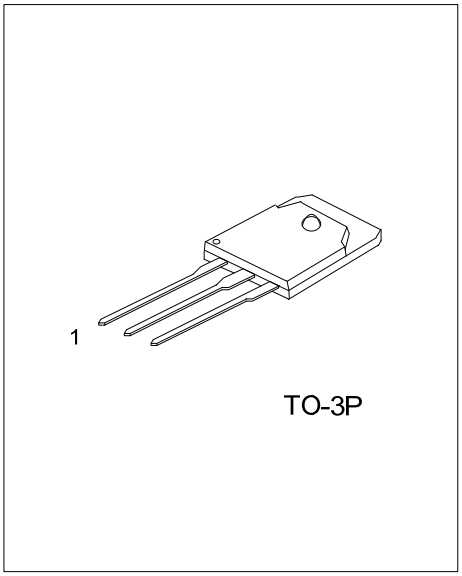
2SD718

NPN EPITAXIAL SILICON TRANSISTOR

HIGH POWER AMPLIFIER APPLICATION



■ FEATURES

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

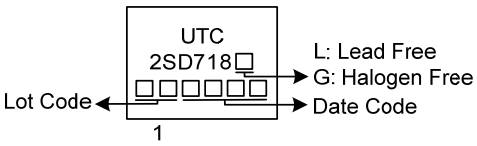
■ ORDERING INFORMATION

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

2SD718G-x-T3P-T (1)Packing Type (2)Package Type (3)Rank (4)Green Package	(1) T: Tube (2) T3P: TO-3P (3) x: refer to Classification of h_{FE} (4) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING



■ ABSOLUTE MAXIMUM RATING (T_A=25°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	Ic	10	A
Base Current	I_B	1	A
Collector Power Dissipation (Tc=25℃)	Pc	80	W
Junction Temperature	T_J	+150	°C
Storage Temperature Range	T_{STG}	-55 ~+150	°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°C, unless otherwise specified)

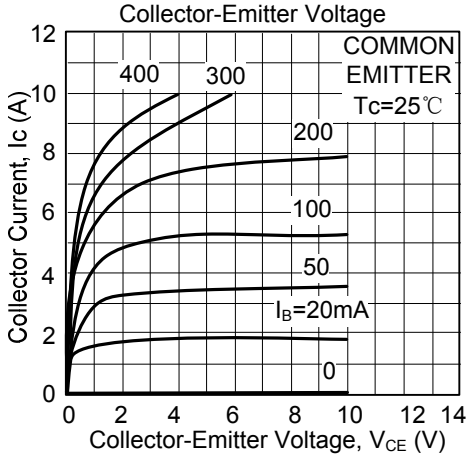
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=50mA, I_B=0	120			V
Collector Cut-off Current	I_{CBO}	V_{CB}=120V, I_E=0			10	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=5V, I_C=0			10	μA
DC Current Gain	h_{FE}	V_{CE}=5V, I_C=1A	55		160	
Collector-Emitter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

■ CLASSIFICATION OF hFE

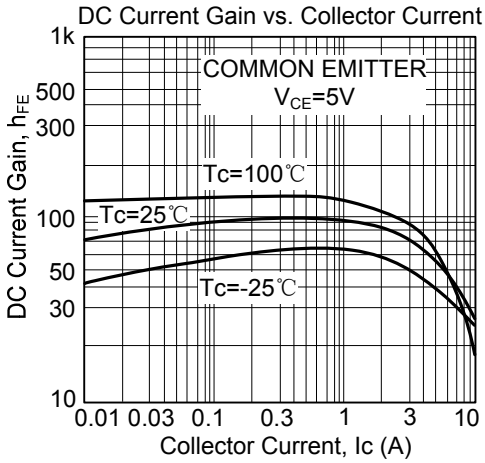
RANK	R	O
RANGE	55 ~ 110	80 ~ 160

■ TYPICAL CHARACTERISTICS

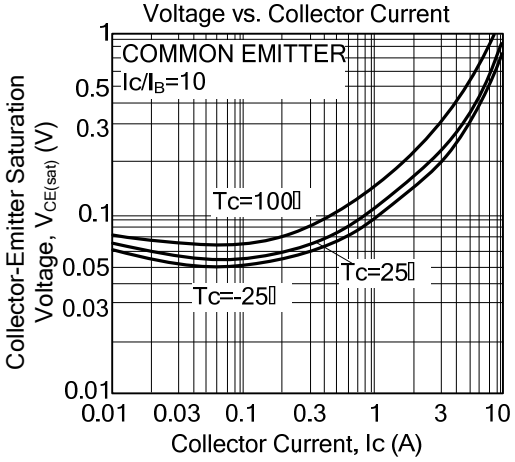
Collector Current vs. Collector-Emitter Voltage



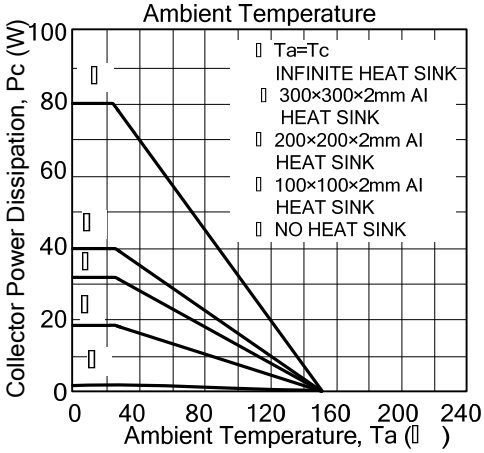
DC Current Gain vs. Collector Current



Collector-Emitter Saturation Voltage vs. Collector Current



Collector Power Dissipation vs. Ambient Temperature



Safe Operating Area