



2N6718

NPN SILICON TRANSISTOR

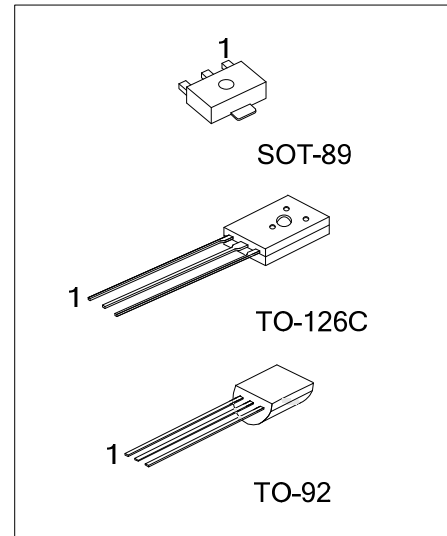
NPN GENERAL PLANAR TRANSISTOR

DESCRIPTION

The UTC **2N6718** is designed for general purpose medium power amplifier and switching applications.

FEATURES

- * High Power: 850mW
- * High Current: 1A



*Pb-free plating product number: 2N6718L

*Pb-free plating product number: 2N6718G

ORDERING INFORMATION

Ordering Number			Package	Pin Assignment			Packing
Normal	Lead Free Plating	Halogen Free		1	2	3	
2N6718-x-AB3-R	2N6718L-x-AB3-R	2N6718G-x-AB3-R	SOT-89	B	C	E	Tape Reel
2N6718-x-T6C-K	2N6718L-x-T6C-K	2N6718G-x-T6C-K	TO-126C	E	C	B	Bulk
2N6718-x-T92-B	2N6718L-x-T92-B	2N6718G-x-T92-B	TO-92	E	C	B	Tape Box
2N6718-x-T92-K	2N6718L-x-T92-K	2N6718G-x-T92-K	TO-92	E	C	B	Bulk

<p>2N6718L-x-AB3-R</p>	<p>(1) Packing Type (2) Package Type (3) Rank (4) Lead Plating</p> <p>(1) B: Tape Box, K: Bulk, R: Tape Reel (2) AB3: SOT-89, T6C: TO-126C, T92: TO-92 (3) x: refer to Classification of h_{FE2} (4) G: Halogen Free, L: Lead Free, Blank: Pb/Sn</p>
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■ ABSOLUTE MAXIMUM RATING (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V _{CBO}	100	V
Collector-Emitter Voltage	V _{CEO}	100	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current (Continue)	I _C	1	A
Collector Current (Pulse)	I _C	2	A
Total Power Dissipation	SOT-89	0.5	W
	TO-126C	1.6	W
	TO-92	850	mW
Junction Temperature	T _J	+150	°C
Storage Temperature	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 (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV _{CBO}	I _C =100uA	100			V
Collector-Emitter Breakdown Voltage (note)	BV _{CEO}	I _C =1mA	100			V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E =10μA	5			V
Collector-Emitter Saturation Voltage	V _{CE(SAT)}	I _C =350mA, I _B =35mA			350	mV
Collector Cut-Off Current	I _{CBO}	V _{CB} =80V			100	nA
DC Current Gain	h _{FE1}	V _{CE} =1V, I _C =50mA	80			
	h _{FE2}	V _{CE} =1V, I _C =250mA	50		300	
	h _{FE3}	V _{CE} =1V, I _C =500mA	20			
Current Gain - Bandwidth Product	f _T	V _{CE} =10V, I _C =50mA, f=100MHz	50			MHz
Output Capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz			20	pF

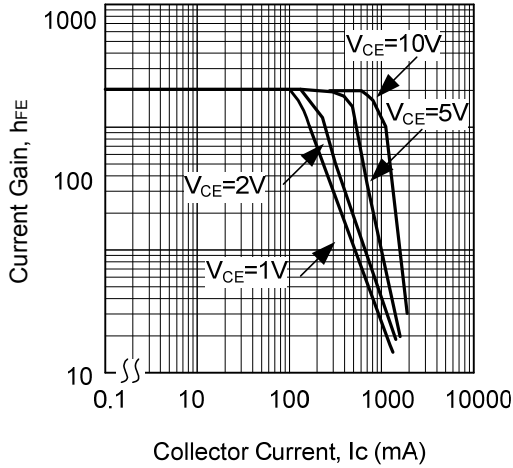
Note: Pulse test: PulseWidth≤380μs, Duty Cycle≤2%

■ CLASSIFICATION OF h_{FE2}

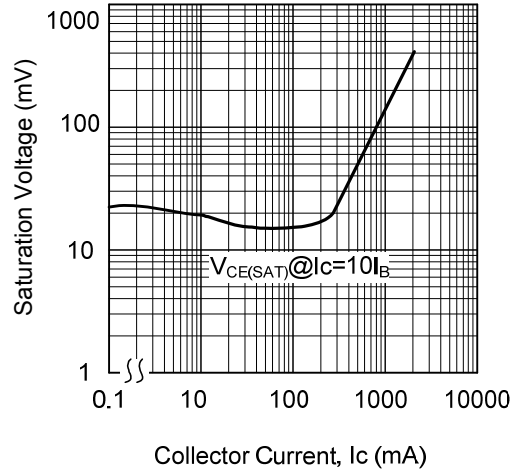
RANK	A	B
RANGE	50~115	95~300

■ TYPICAL CHARACTERISTICS

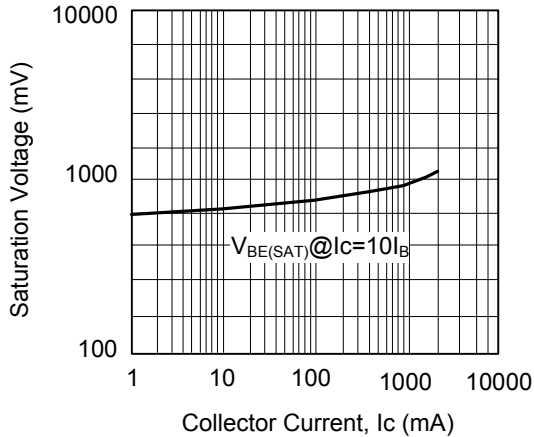
Current Gain vs. Collector Current



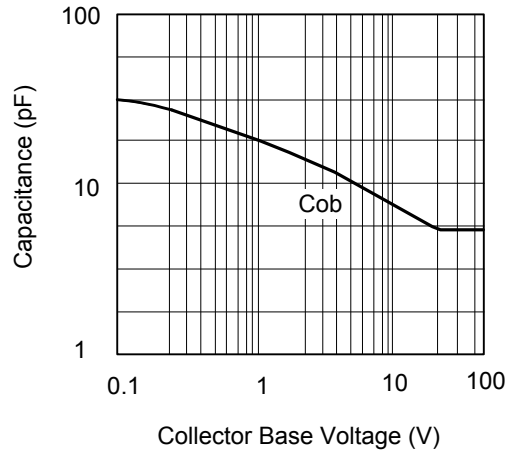
Saturation Voltage vs. Collector Current



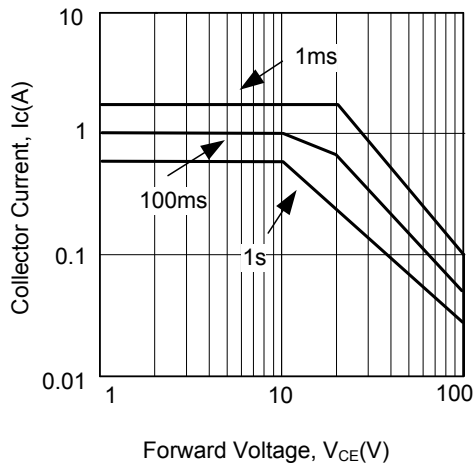
Saturation Voltage vs. Collector Current



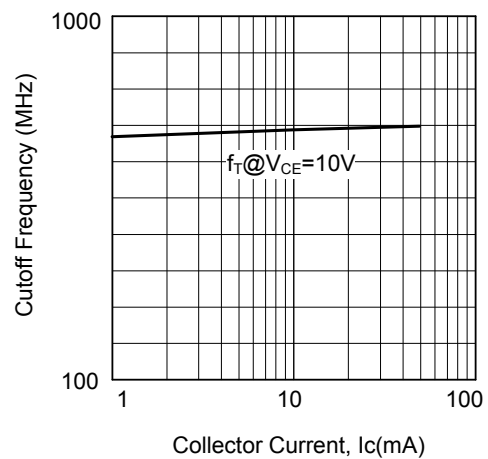
Collector Output Capacitance



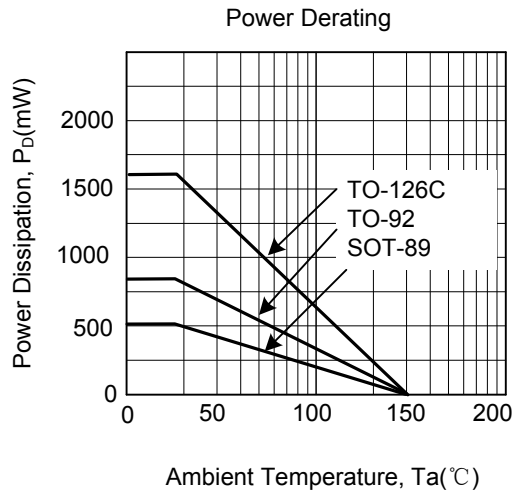
Safe Operating Area



Cutoff Frequency vs. Collector Current



■ TYPICAL CHARACTERISTICS



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