



2N6718

NPN SILICON TRANSISTOR

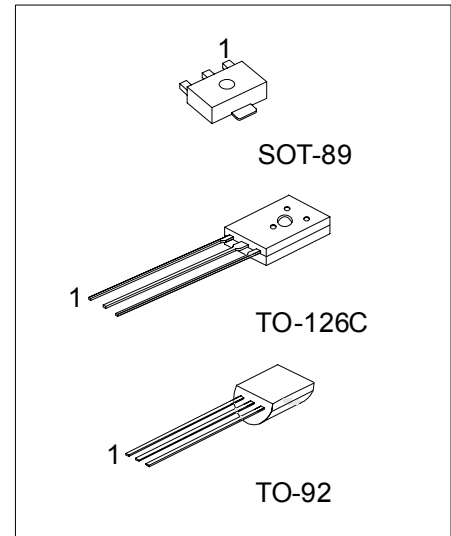
NPN GENERAL PLANAR TRANSISTOR

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

ORDERING INFORMATION

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

2N6718L-x-AB3-R	(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) L: Lead Free Plating, Blank: Pb/Sn
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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	P_D	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}	$I_C=100\mu A$	100			V
Collector-Emitter Breakdown Voltage (note)	BV_{CEO}	$I_C=1mA$	100			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=10\mu A$	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

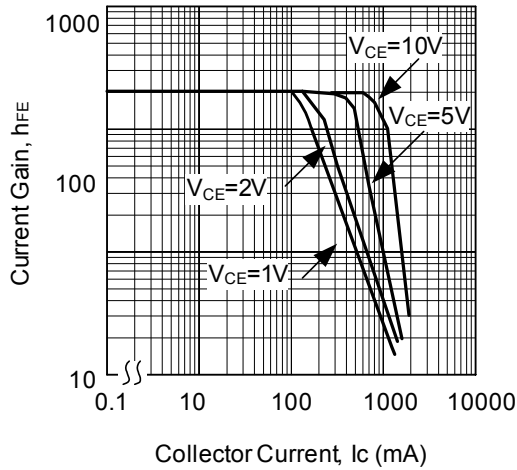
Note: Pulse test: PulseWidth≤380μs, Duty Cycle≤2%

■ **CLASSIFICATION OF h_{FE2}**

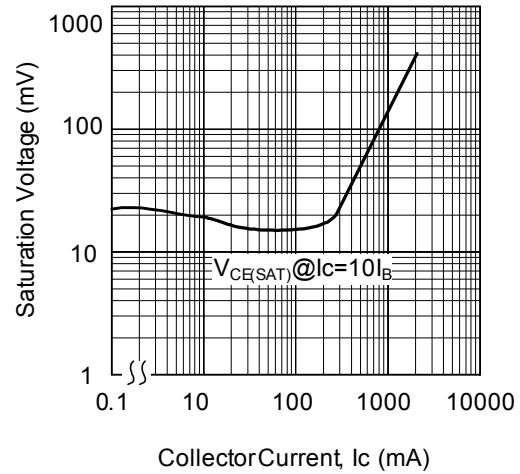
RANK	A	B
RANGE	50~115	95~300

■ TYPICAL CHARACTERISTICS

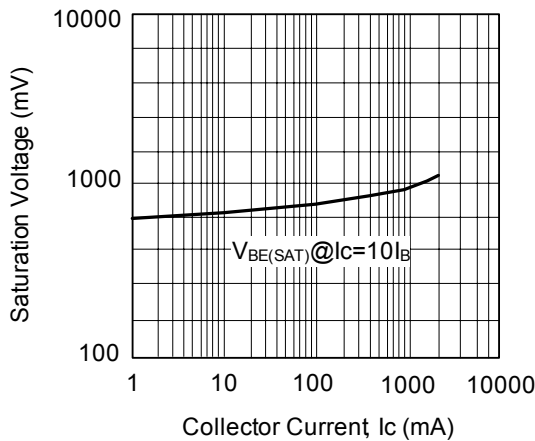
Current Gain vs. Collector Current



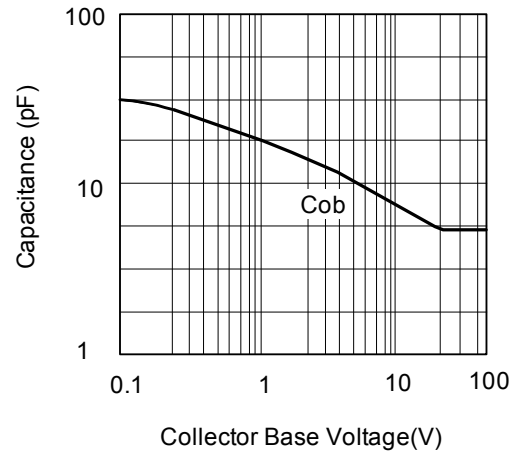
Saturation Voltage vs. Collector Current



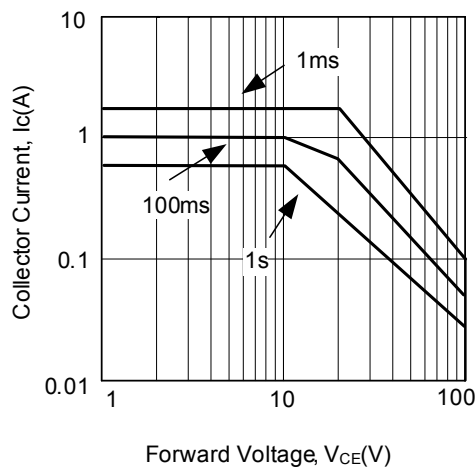
Saturation Voltage vs. Collector Current



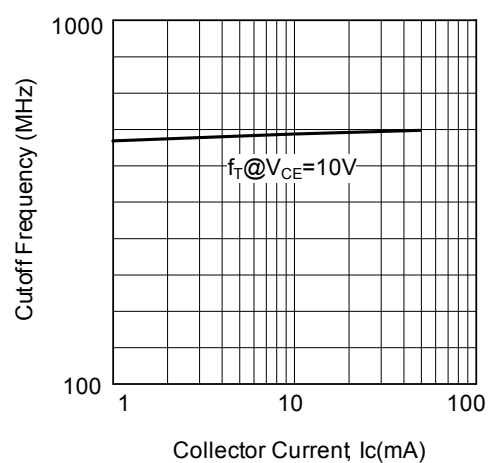
Collector Output Capacitance



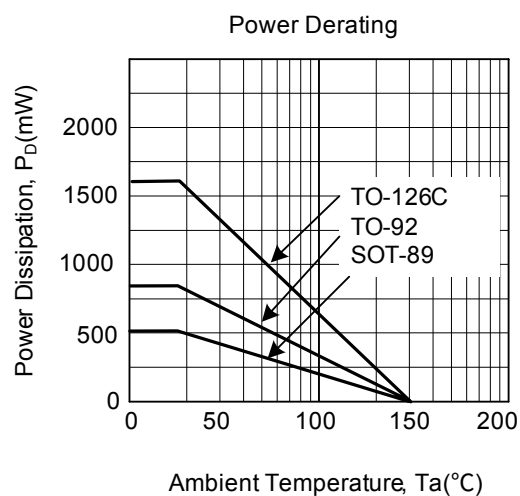
Safe Operating Area



Cutoff Frequency vs. Collector Current



■ TYPICAL CHARACTERISTICS



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