



# 2N6718

## NPN SILICON TRANSISTOR

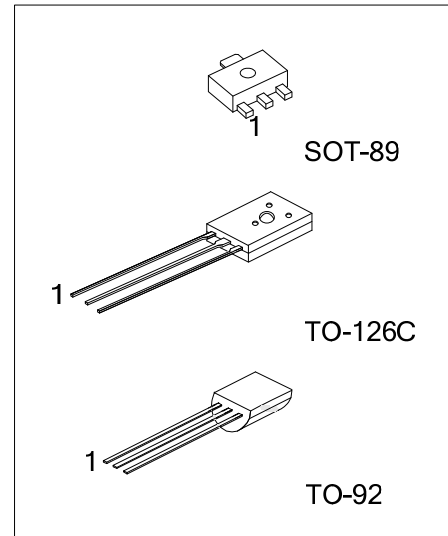
### NPN GENERAL PLANAR TRANSISTOR

■ DESCRIPTION

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

■ FEATURES

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



■ ORDERING INFORMATION

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

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

<p>2N6718G-x-AB3-R</p> <ul style="list-style-type: none"> <li>(1)Packing Type</li> <li>(2)Package Type</li> <li>(3)Rank</li> <li>(4)Green Package</li> </ul>	<ul style="list-style-type: none"> <li>(1) B: Tape Box, K: Bulk, R: Tape Reel</li> <li>(2) AB3: SOT-89, T6C: TO-126C, T92: TO-92</li> <li>(3) x: refer to Classification of <math>h_{FE2}</math></li> <li>(4) G: Halogen Free and Lead Free, L: Lead Free</li> </ul>
--	--

■ MARKING

SOT-89	TO-126C	TO-92
<p>□□□□ 2N6718□</p> <p>→ Data Code → L: Lead Free → G: Halogen Free</p>	<p>UTC □□□□ 2N6718□</p> <p>→ Data Code → L: Lead Free → G: Halogen Free</p>	<p>UTC 2N6718□ □□□</p> <p>→ L: Lead Free → G: Halogen Free → Data Code</p>



■ ABSOLUTE MAXIMUM RATING ( $T_A=25^\circ\text{C}$ , 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	$^\circ\text{C}$
Operating Temperature	$T_{OPR}$	-40 ~ +125	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-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)

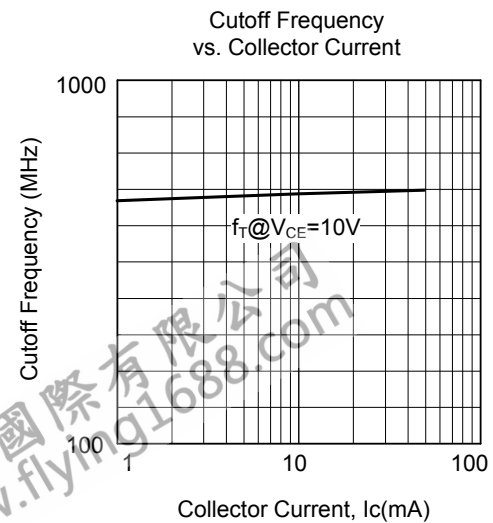
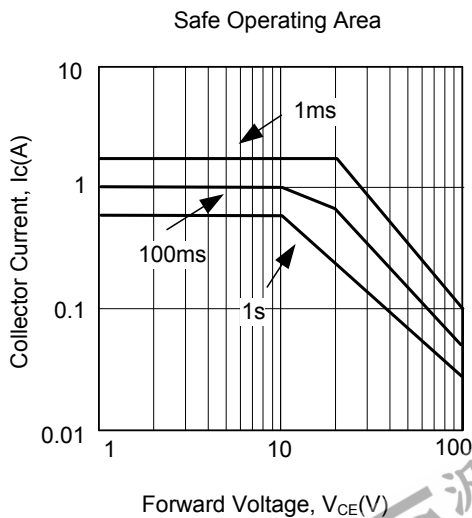
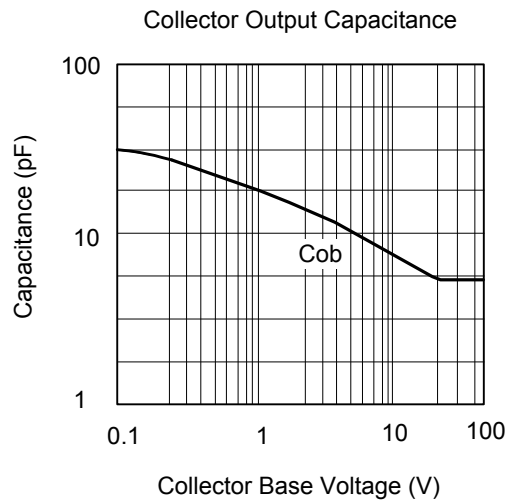
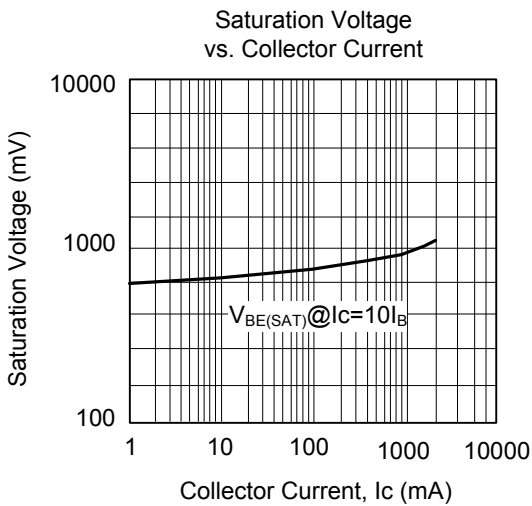
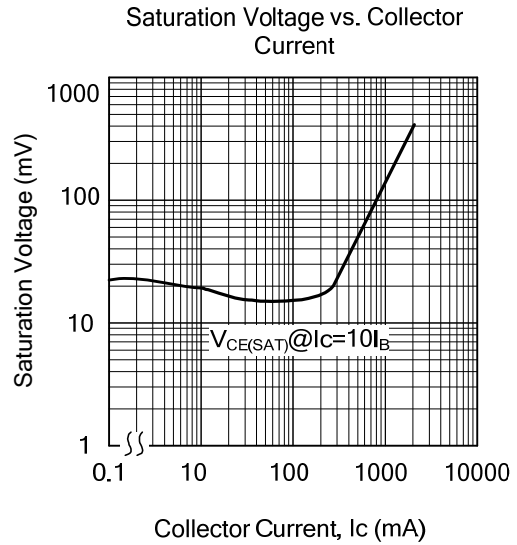
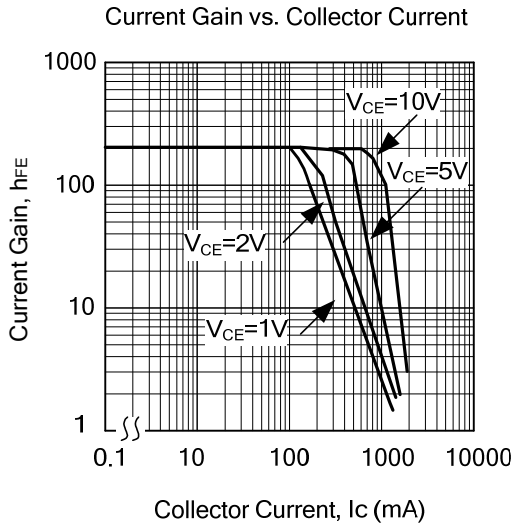
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	$BV_{CBO}$	$I_C=100\mu\text{A}$	100			V
Collector-Emitter Breakdown Voltage (note)	$BV_{CEO}$	$I_C=1\text{mA}$	100			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E=10\mu\text{A}$	5			V
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=350\text{mA}$ , $I_B=35\text{mA}$			350	mV
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=80\text{V}$			100	nA
DC Current Gain	$h_{FE1}$	$V_{CE}=1\text{V}$ , $I_C=50\text{mA}$	80			
	$h_{FE2}$	$V_{CE}=1\text{V}$ , $I_C=250\text{mA}$	50		300	
	$h_{FE3}$	$V_{CE}=1\text{V}$ , $I_C=500\text{mA}$	20			
Current Gain - Bandwidth Product	$f_T$	$V_{CE}=10\text{V}$ , $I_C=50\text{mA}$ , $f=100\text{MHz}$	50			MHz
Output Capacitance	$C_{ob}$	$V_{CB}=10\text{V}$ , $I_E=0$ , $f=1\text{MHz}$			20	pF

Note: Pulse test: PulseWidth $\leq 380\mu\text{s}$ , Duty Cycle $\leq 2\%$

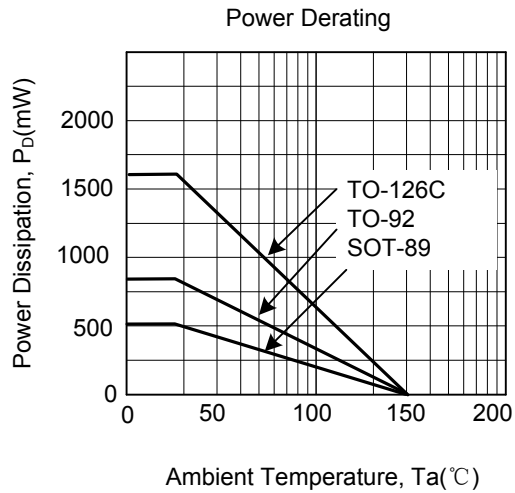
■ CLASSIFICATION OF  $h_{FE2}$

RANK	A	B
RANGE	50~115	95~300

## TYPICAL CHARACTERISTICS



### ■ TYPICAL CHARACTERISTICS



UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.