



No.943G

**2SC3068**

NPN Epitaxial Planar Silicon Transistor

High  $h_{FE}$ , Low-Frequency  
General-Purpose Amp Applications

**Applications**

- Low-frequency, general-purpose amp., various drivers, muting circuit

**Features**

- High DC current gain ( $h_{FE}=800$  to  $3200$ )
- Large current capacity
- Low collector-to-emitter saturation voltage ( $V_{CE(sat)}=0.5V$  max.)
- High  $V_{EBO}$  ( $V_{EBO} \geq 15V$ )

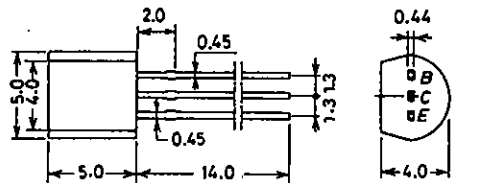
**Absolute Maximum Ratings/ $T_a=25^\circ C$**

			unit
Collector to Base Voltage	$V_{CBO}$	30	V
Collector to Emitter Voltage	$V_{CEO}$	25	V
Emitter to Base Voltage	$V_{EBO}$	15	V
Collector Current	$I_C$	300	mA
Collector Current(Pulse)	$I_{CP}$	500	mA
Base Current	$I_B$	60	mA
Collector Dissipation	$P_C$	600	mW
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ C$

**Electrical Characteristics/ $T_a=25^\circ C$**

			min	typ	max	unit
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=20V, I_E=0$			0.1	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=10V, I_C=0$			0.1	$\mu A$
DC Current Gain	$h_{FE}(1)$	$V_{CE}=5V, I_C=10mA$	800	1500	3200	
	$h_{FE}(2)$	$V_{CE}=5V, I_C=200mA$	600			
Gain-bandwidth product	$f_T$	$V_{CE}=10V, I_C=10mA$		250		MHz
Common Base Output Capacitance	$c_{ob}$	$V_{CB}=10V, f=1MHz$		4.5		pF
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=200mA, I_B=4mA$		0.12	0.5	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=200mA, I_B=4mA$		0.85	1.2	V
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	30			V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	25			V
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	15			V

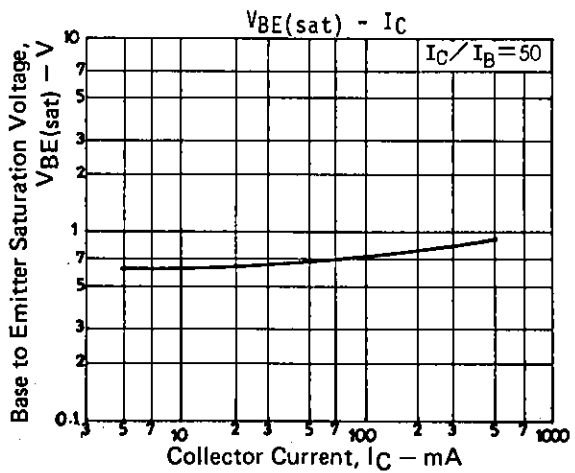
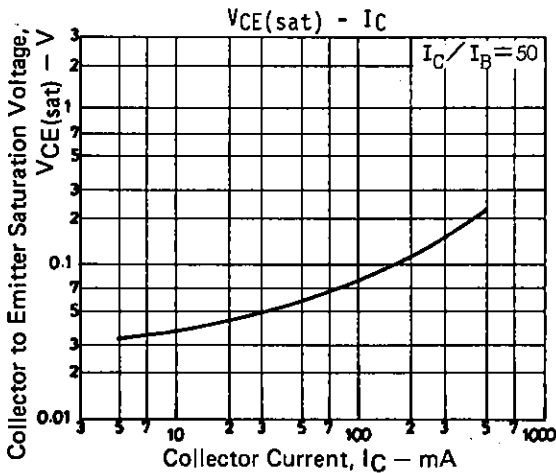
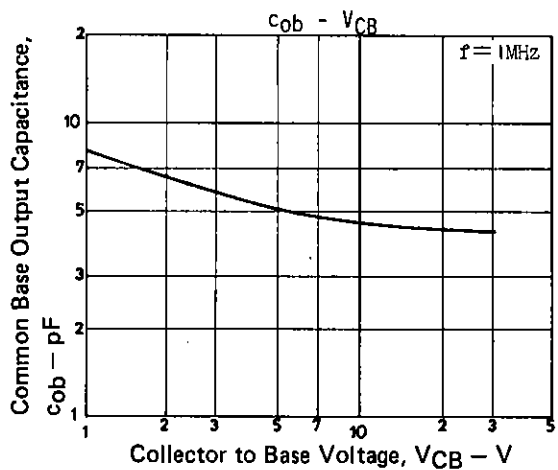
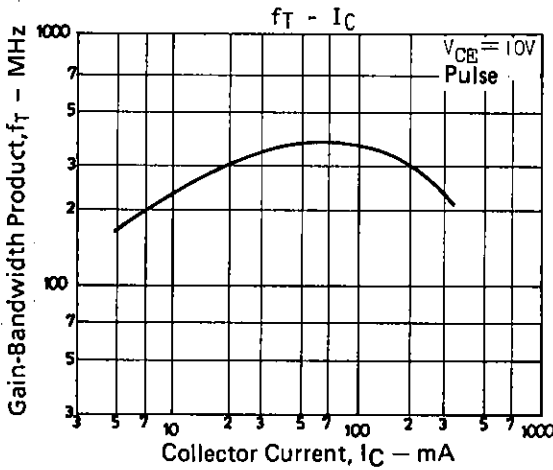
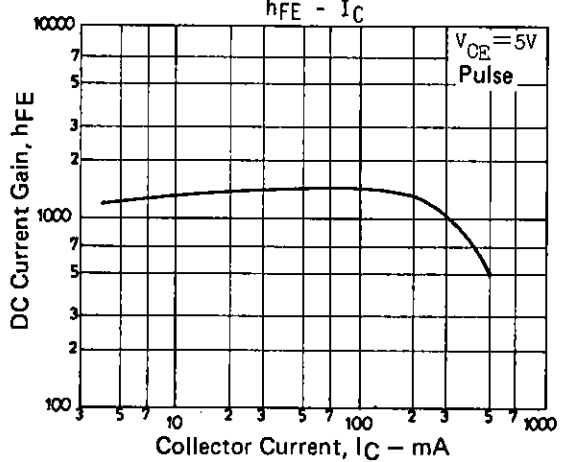
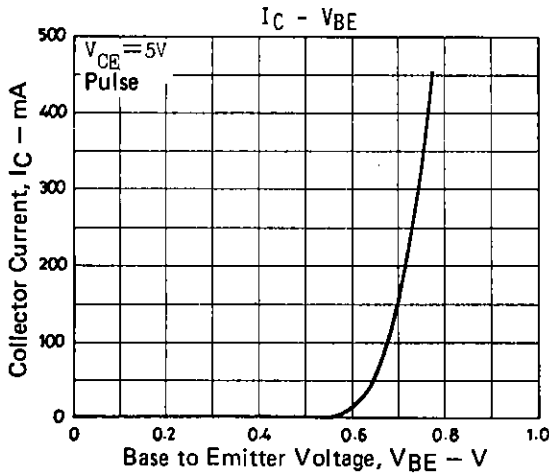
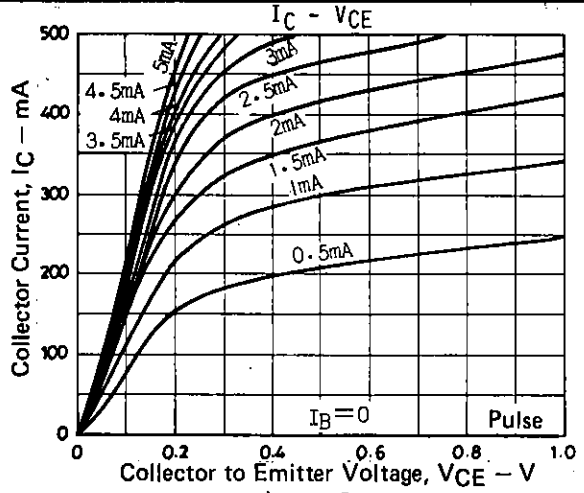
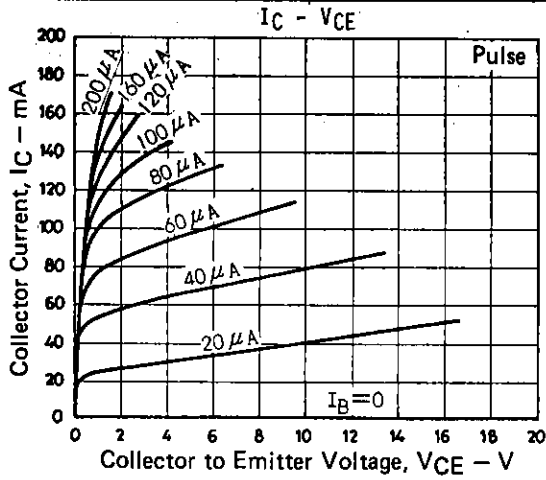
**Package Dimensions 2003A**  
(unit: mm)

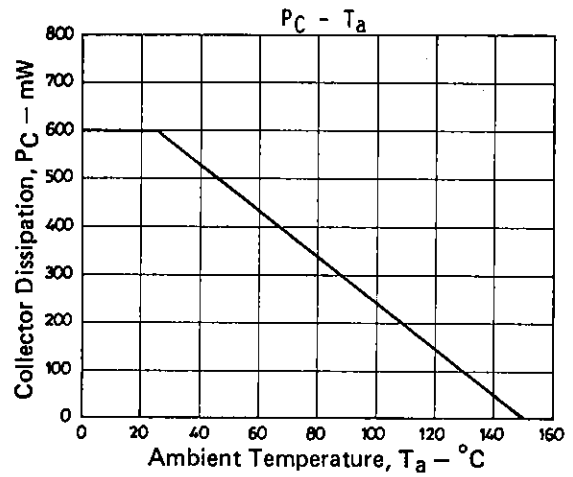
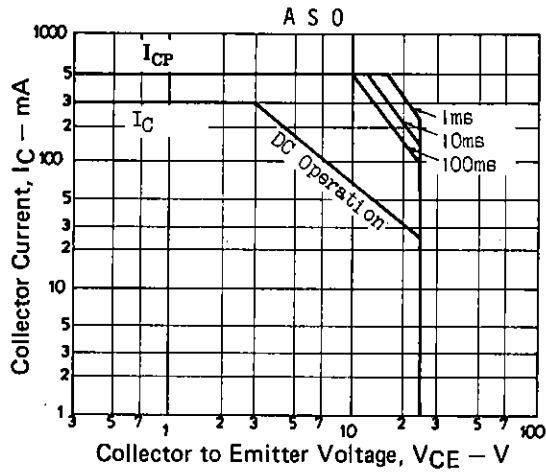


JEDEC: TO-92  
EIAJ: SC-43  
SANYO: NP

B. Base  
C. Collector  
E. Emitter

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