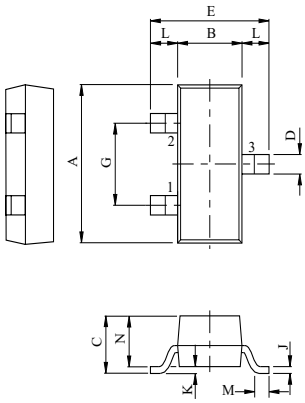
2N4401SC

EPITAXIAL PLANAR NPN TRANSISTOR

GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

FEATURES

· Complementary to the 2N4403SC



DIM	MILLIMETERS
A	2.90±0.1
B	1.30+0.20/-0.15
C	1.30 MAX
D	0.40+0.15/-0.05
E	2.40+0.30/-0.20
G	1.90
J	0.10
K	0.00 ~ 0.10
L	0.55
M	0.20 MIN
N	1.00+0.20/-0.10

1. EMITTER
2. BASE
3. COLLECTOR

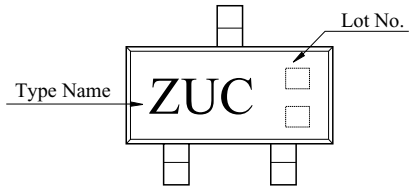
SOT-23(1)

MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	75	V
Collector-Emitter Voltage	V_{CEO}	40	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	600	mA
Collector Power Dissipation	P_C *	350	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 150	℃

Note : * Package Mounted On 99.5% Alumina 10×8×0.6㎜)

Marking

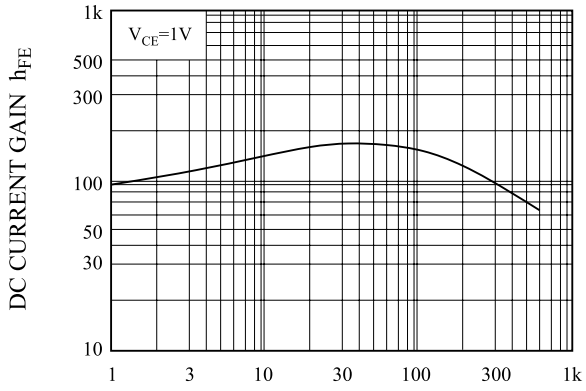


ELECTRICAL CHARACTERISTICS (Ta=25℃)

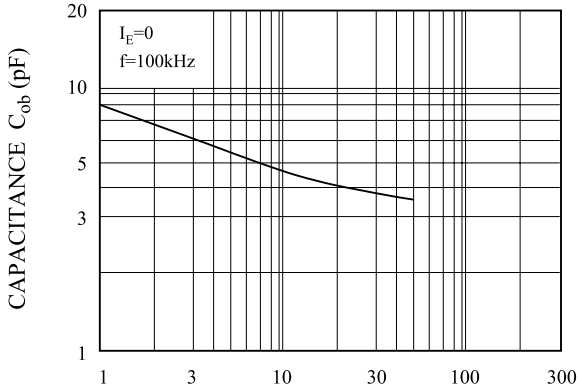
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CEX}	V_{CE}=60V, V_{EB}=-3V	-	-	10	nA
Collector Cut-off Current	I_{CBO}	V_{CB}=60V, I_E=0	-	-	10	nA
Emitter Cut-off Current	I_{EBO}	V_{EB}=3V, I_C=0	-	-	10	nA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=100 μA, I_E=0	75	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=1mA, I_B=0	40	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=100 μA, I_C=0	6.0	-	-	V
DC Current Gain *	h_{FE}	V_{CE}=10V, I_C=150mA	150	-	250	
Collector-Emitter Saturation Voltage *	$V_{CE(sat)}$	I_C=500mA, I_B=50mA	-	-	1.0	V
Base-Emitter Saturation Voltage *	$V_{BE(sat)}$	I_C=500mA, I_B=50mA	-	-	2.0	V
Transition Frequency	f_T	V_{CE}=20V, I_C=20mA, f=100MHz	250	-	-	MHz

* Pulse Test : Pulse Width≦300 μS, Duty Cycle≦2%.

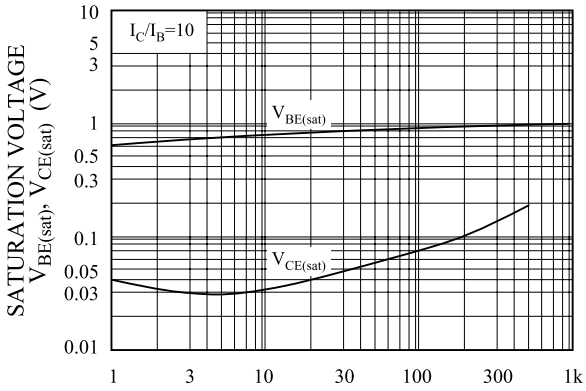
h_{FE} - I_C



C_{ob} - V_{CB}



$V_{BE(sat)}$, $V_{CE(sat)}$ - I_C



SAFE OPERATING AREA