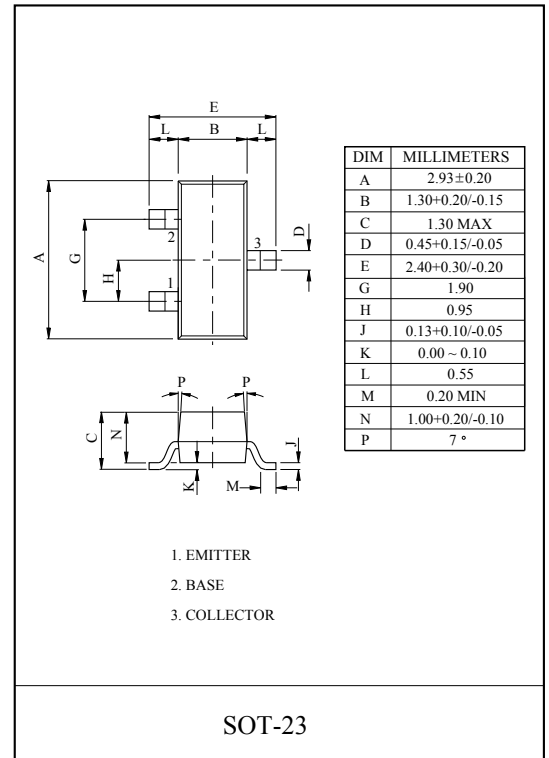


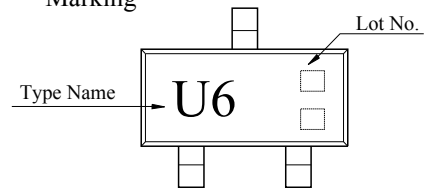
GENERAL PURPOSE APPLICATION.  
SWITCHING APPLICATION.

### MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CB0}$	120	V
Collector-Emitter Voltage	$V_{CEO}$	80	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	100	mA
Emitter Current	$I_E$	-100	mA
Collector Power Dissipation	$P_C$	200	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-65 ~ 150	°C



### Marking



### ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=4mA, I_B=0$	80	-	-	V
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	120	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	5.0	-	-	V
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=90V, I_E=0$	-	-	100	nA
		$V_{CB}=90V, I_E=0, T_a=150^\circ C$	-	-	50	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=5V, I_C=0$	-	-	200	nA
DC Current Gain	$h_{FE}$	$V_{CE}=1V, I_C=1mA$	-	60	-	
		$V_{CE}=1V, I_C=4mA$	20	-	-	
		$V_{CE}=1V, I_C=10mA$	-	80	-	
		$V_{CE}=1V, I_C=20mA$	-	55	-	
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=4mA, I_B=0.4mA$	-	-	1.2	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=4mA, I_B=0.4mA$	-	-	0.15	V
		$I_C=50mA, I_B=15mA$	-	-	0.2	
Transition Frequency	$f_T$	$V_{CE}=10V, I_C=4mA, f=100MHz$	60	-	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	-	5.0	pF