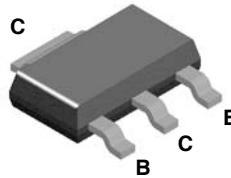


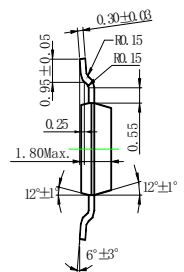
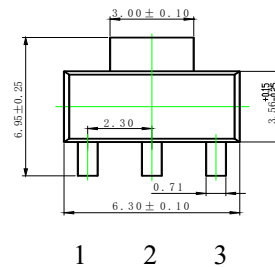
FEATURES

- RoHS Compliant Product
- Low Current
 $I_{CM} : 300 \text{ mA (Max.)}$
- High Voltage
 $V_{CEO} : 400 \text{ V}$



- BASE
- COLLECTOR
- EMITTER

SOT-223



MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

TYPE NUMBER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	500	V
Collector-Emitter Voltage	V_{CEO}	400	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current-Continuous	I_C	300	mA
Transition Frequency	P_C	1000	mW
Junction and Storage Temperature	T_J, T_{STG}	-55 ~ +150	$^\circ\text{C}$

●ELECTRICAL CHARACTERISTICS ($T_{amb} = 25^\circ\text{C}$ unless otherwise specified)

TYPE NUMBER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 100 \mu\text{A}, I_E = 0$	500			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1 \text{ mA}, I_B = 0$	400			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 100 \mu\text{A}, I_C = 0$	6			V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = 400 \text{ V}, I_E = 0$			0.1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = 4 \text{ V}, I_C = 0$			0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = 10 \text{ V}, I_C = 1 \text{ mA}$	40			
	$h_{FE(2)}$	$V_{CE} = 10 \text{ V}, I_C = 10 \text{ mA}$	50		300	
	$h_{FE(3)}$	$V_{CE} = 10 \text{ V}, I_C = 50 \text{ mA}$	45			
	$h_{FE(4)}$	$V_{CE} = 10 \text{ V}, I_C = 100 \text{ mA}$	40			
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C = 1 \text{ mA}, I_B = 0.1 \text{ mA}$			0.4	V
	$V_{CE(SAT)}$	$I_C = 10 \text{ mA}, I_B = 1 \text{ mA}$			0.5	V
	$V_{CE(SAT)}$	$I_C = 50 \text{ mA}, I_B = 5 \text{ mA}$			0.75	V
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	$I_C = 10 \text{ mA}, I_B = 1 \text{ mA}$			0.85	V
Transition Frequency	f_T	$V_{CE} = 10 \text{ V}, I_C = 10 \text{ mA}, f = 100 \text{ MHz}$	20			MHz
Collector Capacitance	C_c	$V_{CB} = 20 \text{ V}, I_E = 0, f = 1 \text{ MHz}$			7	pF
Emitter Capacitance	C_e	$V_{EB} = 0.5 \text{ V}, I_C = 0, f = 1 \text{ MHz}$			180	pF

Characteristics Curve

