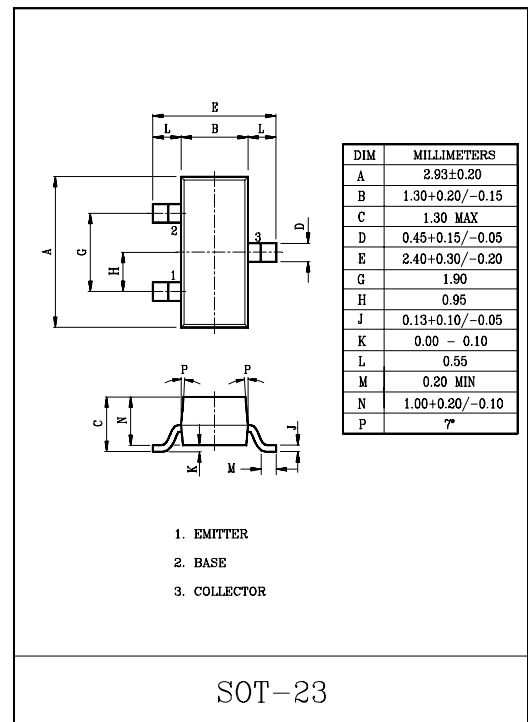


HIGH VOLTAGE APPLICATION.
TELEPHONE APPLICATION.

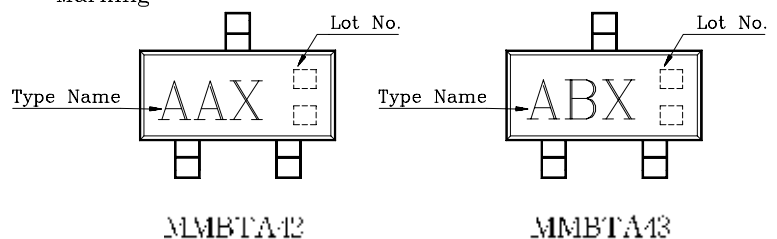
MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	MMBTA42	V_{CB0}	300	V
	MMBTA43		200	
Collector-Emitter Voltage	MMBTA42	V_{CE0}	300	V
	MMBTA43		200	
Emitter Base Voltage		V_{EB0}	5.0	V
Collector Current		I_C	500	mA
Emitter Current		I_E	-500	mA
Collector Power Dissipation		P_C *	370	mW
Junction Temperature		T_J	150	°C
Storage Temperature		T_{STG}	-55 ~ 150	°C

Pc * : Package mounted on 99.5% alumina 10 x 8 x 0.6mm.



Marking



ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage	MMBTA42	V_{CB0}	300			V
	MMBTA43		200			
Collector-Emitter Breakdown Voltage	MMBTA42	V_{CE0}	300			V
	MMBTA43		200			
DC Current Gain	β_{DC}	$I_C=1.0mA, V_{CE}=10V$	40	-	-	
		$I_C=10mA, V_{CE}=10V$	40			
		$I_C=30mA, V_{CE}=10V$	40	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=20mA, I_E=2.0mA$	-	-	0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=20mA, I_E=2.0mA$			0.9	V
Transition Frequency	f_T	$V_{CE}=20V, I_C=10mA, f=100MHz$	50	-	-	MHz
Collector Output Capacitance	MMBTA42	C_{CO}			3.0	pF
	MMBTA43				4.0	

*Pulse Test : Pulse Width≤300μs, Duty Cycle≤20%.

MMBTA42/43

