

**HIGH VOLTAGE APPLICATION.
TELEPHONE APPLICATION.**

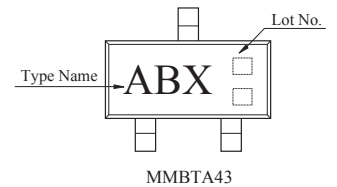
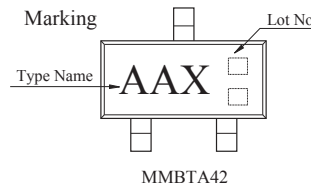
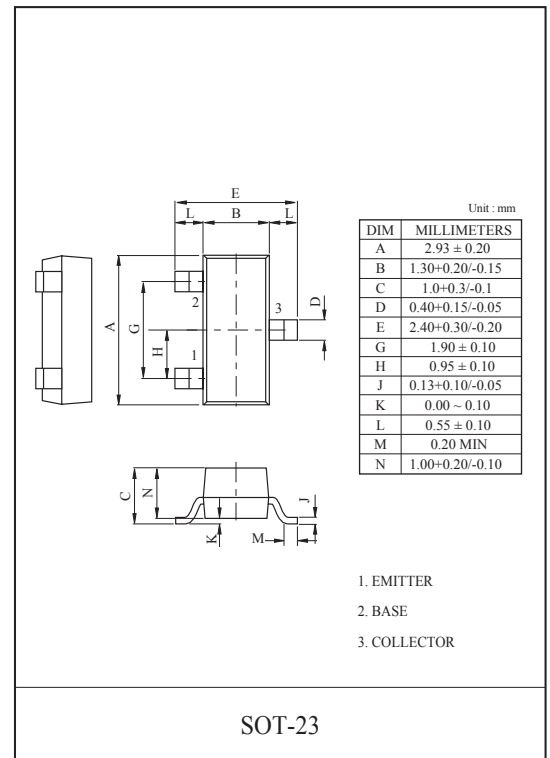
FEATURES

- Complementary to MMBTA92/93.
- Suffix U : Qualified to AEC-Q101.
ex) MMBTA42-RTK/PU

MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	MMBTA42	V _{CBO}	300	V
	MMBTA43		200	
Collector-Emitter Voltage	MMBTA42	V _{CEO}	300	V
	MMBTA43		200	
Emitter-Base Voltage		V _{EBO}	5.0	V
Collector Current		I _C	500	mA
Emitter Current		I _E	-500	mA
Collector Power Dissipation		P _C *	350	mW
Junction Temperature		T _j	150	°C
Storage Temperature		T _{stg}	-55 ~ 150	°C

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



ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage	MMBTA42	V _{(BR)CBO}	I _C =100μA, I _E =0	300	-	-	V
	MMBTA43			200	-	-	
Collector-Emitter Breakdown Voltage	MMBTA42	V _{(BE)CEO}	I _C =1.0mA, I _B =0	300	-	-	V
	MMBTA43			200	-	-	
DC Current Gain	* h _{FE}		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 _B =2.0mA	-	-	0.5	V
Base-Emitter Saturation Voltage		V _{BE(sat)}	I _C =20mA, I _B =2.0mA	-	-	0.9	V
Transition Frequency		f _T	V _{CE} =20V, I _C =10mA, f=100MHz	50	-	-	MHz
Collector Output Capacitance	MMBTA42	C _{ob}	V _{CB} =20V, I _E =0, f=1MHz	-	-	3.0	pF
	MMBTA43			-	-	4.0	

*Pulse Test : Pulse Width ≤ 300μS, Duty Cycle ≤ 2.0%

MMBTA42/43

