

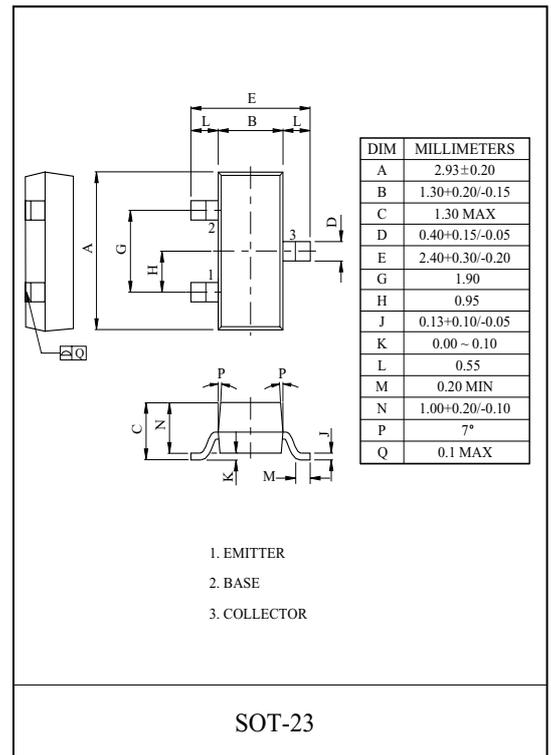
HIGH VOLTAGE APPLICATION.
TELEPHONE APPLICATION.

FEATURES

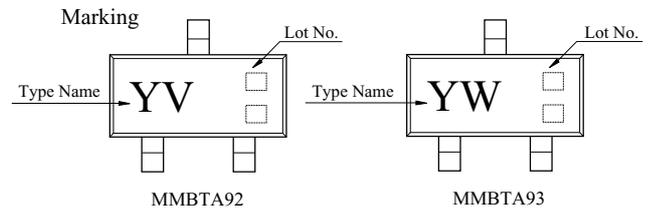
- Complementary to MMBTA42/43.

MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	MMBTA92	V_{CBO}	-300	V
	MMBTA93		-200	
Collector-Emitter Voltage	MMBTA92	V_{CEO}	-300	V
	MMBTA93		-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	
Storage Temperature		T_{stg}	-55 150	



* : 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	MMBTA92	$V_{(BR)CBO}$	$I_C = -100 \mu A, I_E = 0$	-300	-	-	V
	MMBTA93			-200	-	-	
Collector-Emitter Breakdown Voltage	MMBTA92	$V_{(BE)CEO}$	$I_C = -1.0 mA, I_B = 0$	-300	-	-	V
	MMBTA93			-200	-	-	
Collector Cut-off Current	MMBTA92	I_{CBO}	$V_{CB} = -300, I_E = 0$	-	-	-250	nA
	MMBTA93		$V_{CB} = -200, I_E = 0$	-	-	-250	
DC Current Gain	* h_{FE}		$I_C = -1.0 mA, V_{CE} = -10V$	25	-	-	
			$I_C = -10 mA, V_{CE} = -10V$	40	-	-	
			$I_C = -30 mA, V_{CE} = -10V$	25	-	-	
Collector-Emitter Saturation Voltage		* $V_{CE(sat)}$	$I_C = -20 mA, I_B = -2.0 mA$	-	-	-0.5	V
Base-Emitter Saturation Voltage		* $V_{BE(sat)}$	$I_C = -20 mA, I_B = -2.0 mA$	-	-	-0.9	V
Transition Frequency		f_T	$V_{CE} = -20V, I_C = -10 mA, f = 100 MHz$	50	-	-	MHz
Collector Output Capacitance	MMBTA92	C_{ob}	$V_{CB} = -20V, I_E = 0, f = 1 MHz$	-	-	6.0	pF
	MMBTA93			-	-	8.0	

*Pulse Test : Pulse Width 300 μs , Duty Cycle 2.0%

MMBTA92/93

