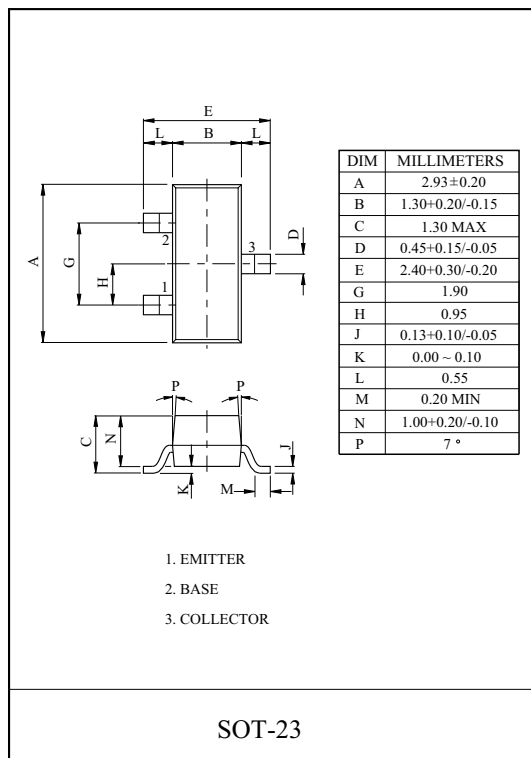


HIGH VOLTAGE APPLICATION.

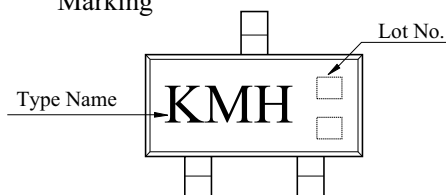
MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-120	V
Collector-Emitter Voltage	V_{CEO}	-100	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	DC	I_C	-1
	Pulse *	I_{CP}	-2
Base Current	I_B	-200	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C

* Pulse Width = 300 μ s, Duty Cycle \leq 2%.



Marking



ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -100 \mu A$	-120	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -10 mA$	-100	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -100 \mu A$	-5	-	-	V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = -100V$	-	-	-100	nA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = -4V$	-	-	-100	nA
Collector-Emitter Cut-Off Current	I_{CES}	$V_{CES} = -100V$	-	-	-100	nA
Collector-Emitter Saturation Voltage **	$V_{CE(sat)}(1)$	$I_C = -250 mA, I_B = -25 mA$	-	-	-0.2	V
	$V_{CE(sat)}(2)$	$I_C = -500 mA, I_B = -50 mA$	-	-	-0.3	V
Base-Emitter Saturation Voltage **	$V_{BE(sat)}$	$I_C = -500 mA, I_B = -50 mA$	-	-	-1.1	V
Base-Emitter Voltag	V_{BE}	$V_{CE} = -5V, I_C = -1 mA$	-	-	-1.0	V
DC Current Gain **	$h_{FE}(1)$	$V_{CE} = -5V, I_C = -1 mA$	100	-	-	
	$h_{FE}(2)$	$V_{CE} = -5V, I_C = -250 mA$	100	-	-	
	$h_{FE}(3)$	$V_{CE} = -5V, I_C = -500 mA$	100	-	300	
	$h_{FE}(4)$	$V_{CE} = -5V, I_C = -1 A$	50	-	-	
Transition Frequency	f_T	$V_{CE} = -10V, I_C = -50 mA, f = 100 MHz$	50	-	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V, f = 1 MHz$	-	-	5	pF

** Pulse Width = 300 μ s, Duty Cycle \leq 2%.

KTA1520S

