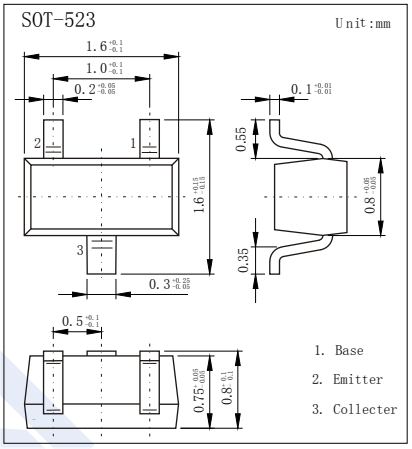
NPN Transistors
KX2000N

■ Features

- High Voltage Transistors
- Pb-Free Packages are Available



■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	250	V
Collector - Emitter Voltage	V_{CEO}	180	
Emitter - Base Voltage	V_{EBO}	5	
Collector Current - Continuous	I_C	0.2	A
Collector Power Dissipation	P_C	0.15	W
Junction Temperature	T_J	150	℃
Storage Temperature Range	T_{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= 100 μA, I_E= 0	250			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= 1 mA, I_B= 0	180			
Emitter - base breakdown voltage	V_{EBO}	I_E= 100 μA, I_C= 0	5			
Collector-base cut-off current	I_{CBO}	V_{CB}= 120 V , I_E= 0			100	nA
Emitter cut-off current	I_{EBO}	V_{EB}= 4V , I_C=0			100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=50 mA, I_B=5mA			0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C= 50 mA, I_B= 5mA			1.0	
DC current gain	$h_{FE(1)}$	V_{CE}=5V, I_C=10mA	100		250	
Transition frequency	f_T	V_{CE}= 5V, I_C=10mA,f=30MHz	100		300	MHz

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

■ Classification of h_{fe}

Marking	20N
Range	100-250