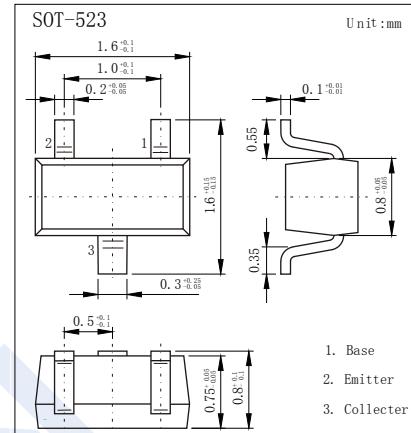


NPN Transistors

KX2000N

■ Features

- High Voltage Transistors
- Pb-Free Packages are Available



■ Absolute Maximum Ratings Ta = 25°C

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	°C
Storage Temperature Range	T _{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25°C

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 μ A, 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 μ s, Duty Cycle=2.0%.

■ Classification of h_{fe}

Marking	20N
Range	100~250