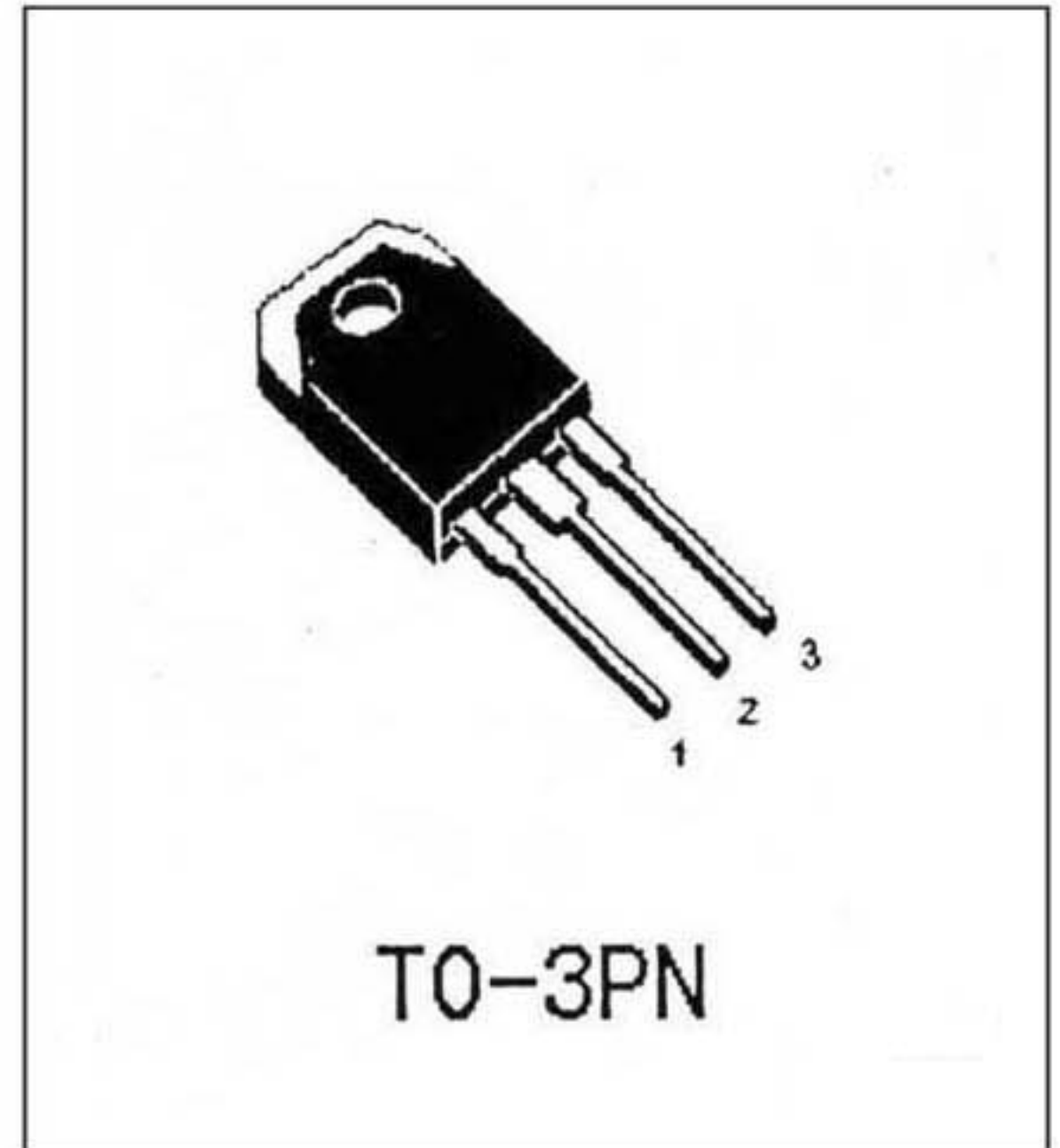


## TO-3PN Plastic-Encapsulate Transistors

# D209L TRANSISTOR(NPN)

### ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Characteristic	Symbol	Value	Unit
Collector-Base Voltage	VCBO	700	V
Collector-Emitter Voltage	VCEO	400	V
Emitter-Base voltage	VEBO	9	V
Collector Current	Ic	12	A
Collector Power Dissipation	Pc	100	W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55~+150	°C



### ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified)

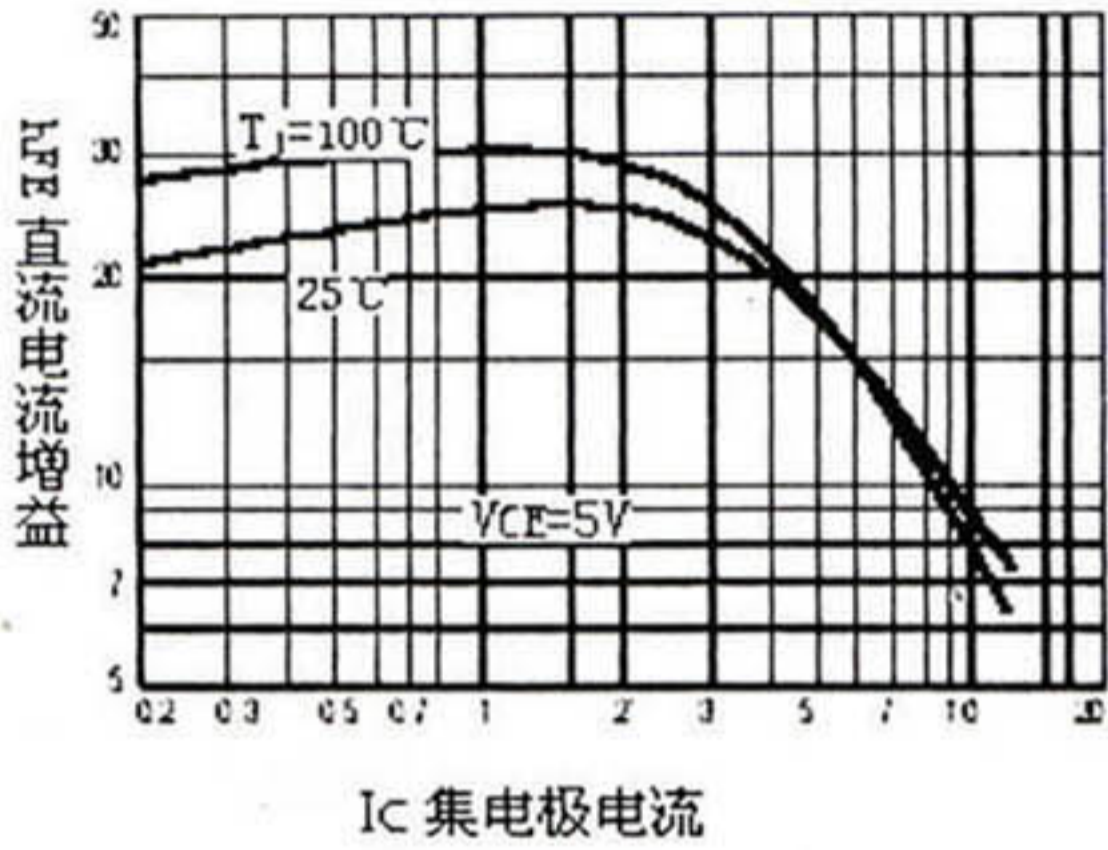
Characteristic	Symbol	Test conditions	MIN	TYP	MAX	Unit
Collector -base breakdown voltage	V(BR)CBO	Ic=1000μA, IE=0	700			V
*Collector -emitter Sustaining Voltage	V(BR)CEO	Ic=10mA, IB=0	400			V
Emitter cut-off current	IEBO	VEB=7V; Ic=0			10	μA
DC current gain	HFE (1)	VCE=5V, Ic=5A	8		40	
	HFE (2)	VCE=5V, Ic=8A	6		30	
Collector -emitter saturation voltage	VCE(sat)	Ic=5A, IB=1A			1	V
		Ic=8A, IB=1.6A			1.2	
Base-emitter saturation voltage	VBE(sat)	Ic=5A, IB=1A			1.2	V
		Ic=8A, IB=1.6A			1.6	
Base Emitter Voltage	VBE(ON)	IE= 2000 mA			3	V
Current Gain Bandwidth Product	ft	VCE=10V, Ic=100mA f=1MHz	5			MHZ
Turn On Time	TON					μs
Storage Time	ts	IC=8A, IB1=-1B2=1.6A			3	μs
Fall Time	tf				0.7	μs



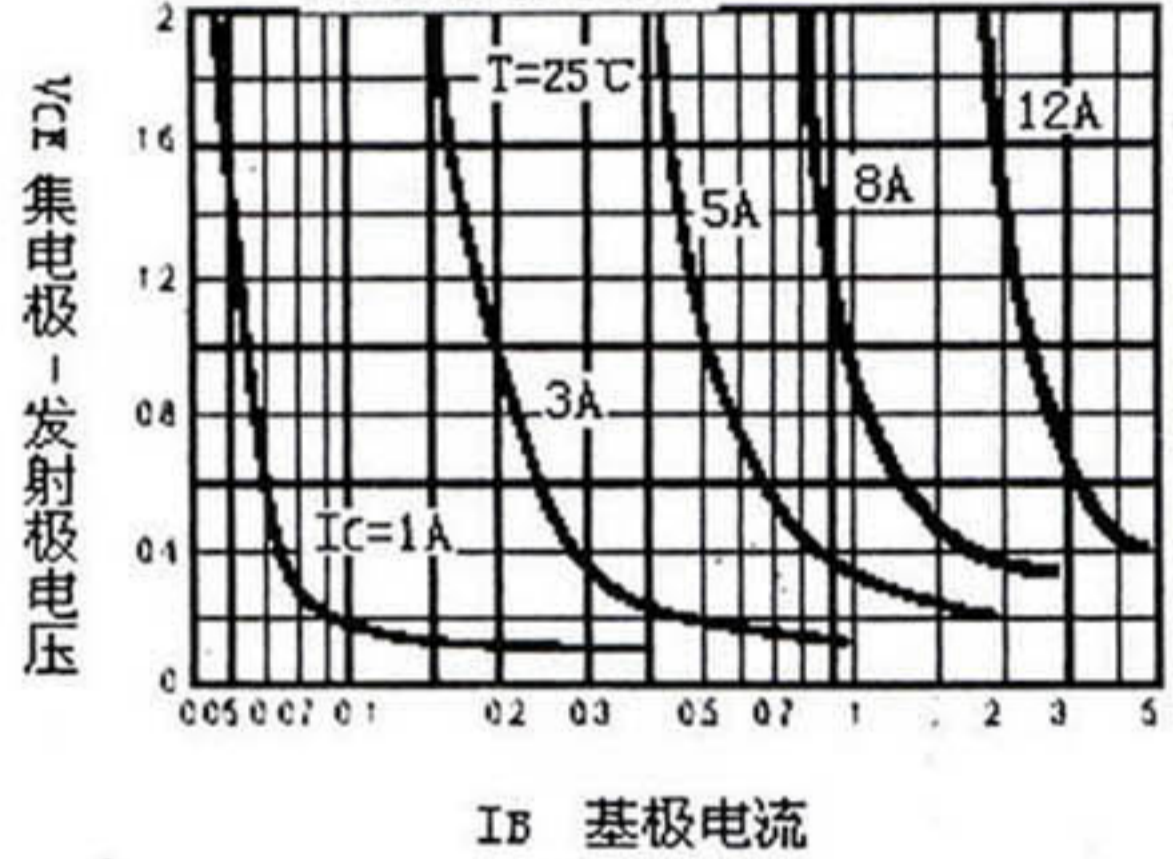
## D209L

### Typical Characteristics

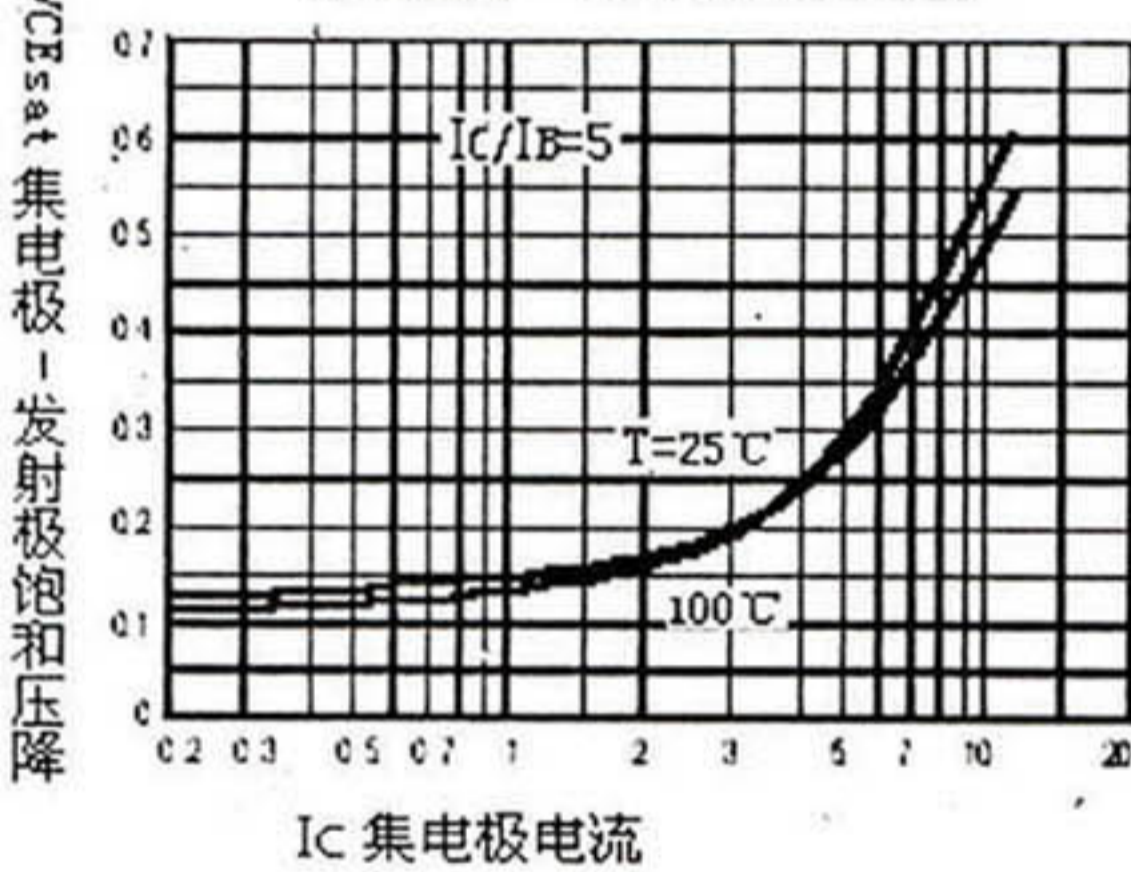
直流增益—集电极电流特性



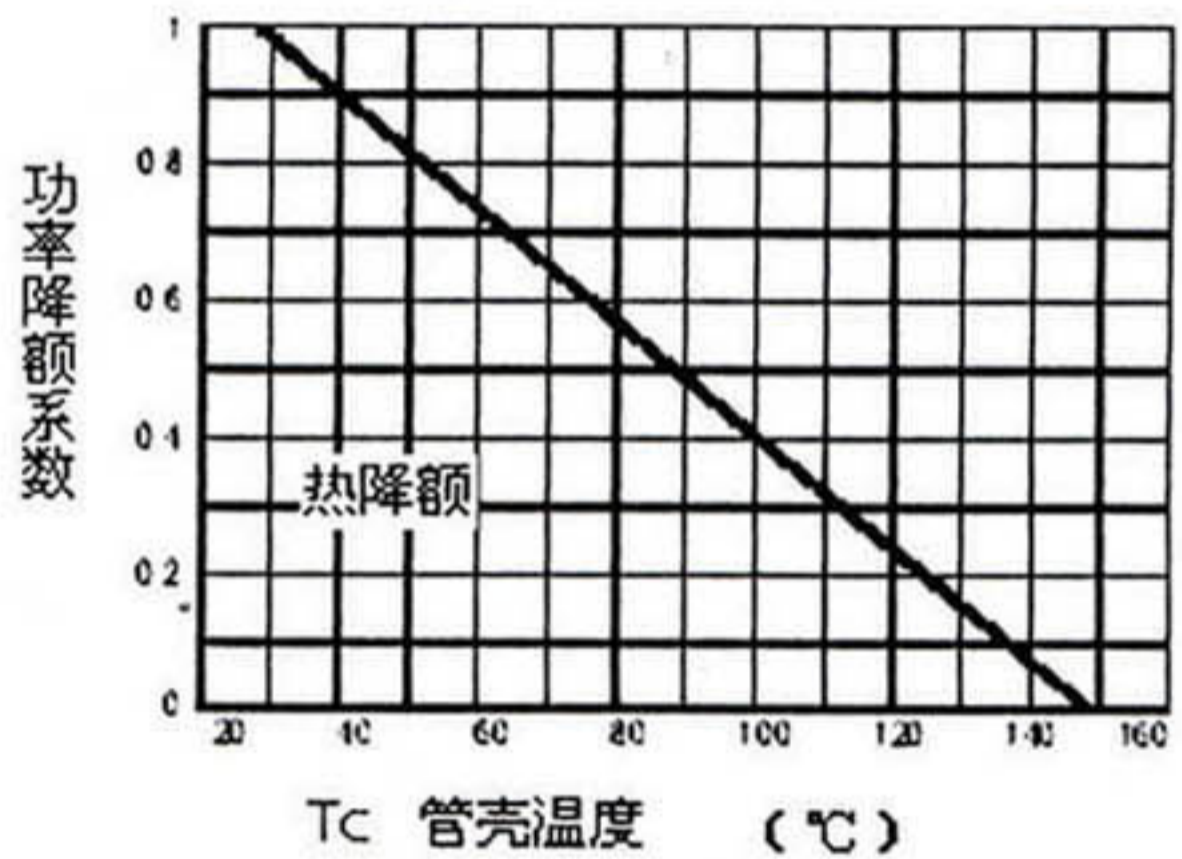
集电极输出特性



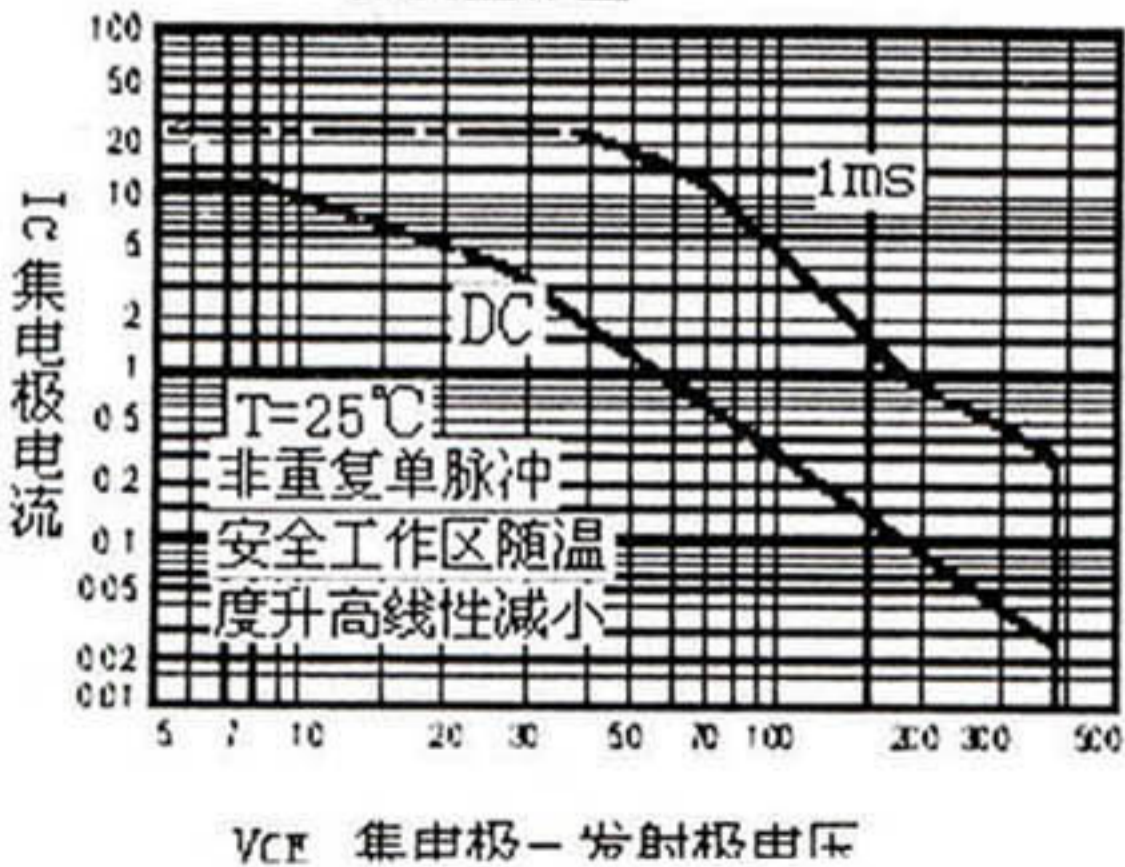
饱和压降—集电极电流特性



功率—温度降额特性



安全工作区





## T0-3PN 外形尺寸图

单位: mm

