

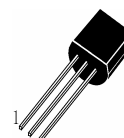
**APPLICATIONS**

Motor drivers.

ABSOLUTE MAXIMUM RATINGS ($T_a=25$)

T_{stg}	Storage Temperature.....	-55~150
T_j	Junction Temperature.....	150
P_C	Collector Dissipation.....	1.5W
V_{CBO}	Collector-Base Voltage.....	-25V
V_{CEO}	Collector-Emitter Voltage.....	-25V
V_{EBO}	Emitter-Base Voltage.....	-5V
I_C	Collector Current.....	-3A

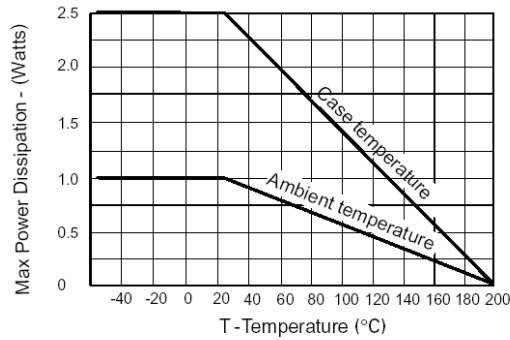
TO-92



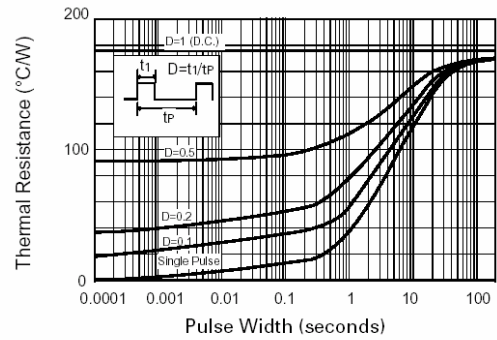
- 1—Emitter , E
2—Base , B
3—Collector ,C

ELECTRICAL CHARACTERISTICS ($T_a=25$)

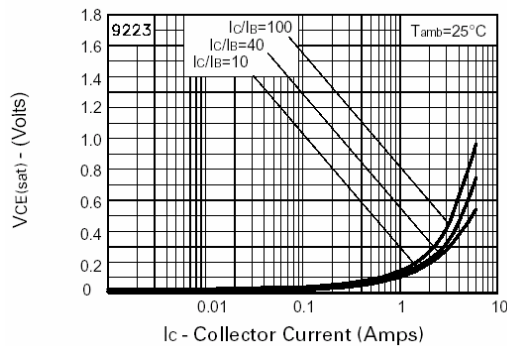
Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CBO}	Collector-Base Breakdown Voltage	-25			V	$I_C=-100\mu A$, $I_E=0$
BV_{CEO}	Collector-Emitter Breakdown Voltage	-25			V	$I_C=-10mA$, $I_B=0$
BV_{EBO}	Emitter-Base Breakdown Voltage	-5			V	$I_E=-100\mu A$, $I_C=0$
I_{CBO}	Collector Cut-off Current			-0.1	μA	$V_{CB}=-15V$, $I_E=0$
I_{EBO}	Emitter Cut-off Current			-0.1	μA	$V_{EB}=-4V$, $I_C=0$
H_{FE}	DC Current Gain	250		490		$V_{CE}=-2V$, $I_C=-1A$
$V_{CE(sat1)}$	Collector- Emitter Saturation Voltage			-0.25	V	$I_C=-1A$, $I_B=-10mA$
$V_{CE(sat2)}$				-0.45	V	$I_C=-2A$, $I_B=-20mA$
$V_{CE(sat3)}$				-0.5	V	$I_C=-3A$, $I_B=-100mA$
$V_{BE(sat)}$	Base-Emitter Saturation Voltage			-1.0	V	$I_C=-1A$, $I_B=-10mA$
$V_{BE(on)}$	Base-Emitter On Voltage		-0.8		V	$V_{CE}=-2V$, $I_C=-1A$
f _r	Current Gain-Bandwidth Product	100			MHz	$V_{CE}=-5V$, $I_C=-50mA$, $f=50MHz$
C _{ob}	Output Capacitance		25		pF	$V_{CB}=-10V$, $I_E=0$, $f=1MHz$



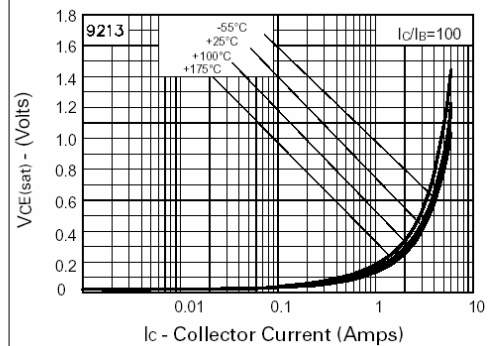
Derating curve



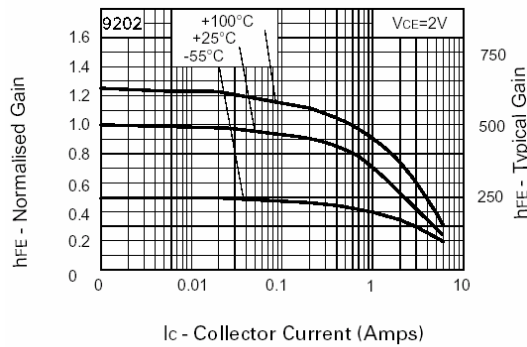
Maximum transient thermal impedance



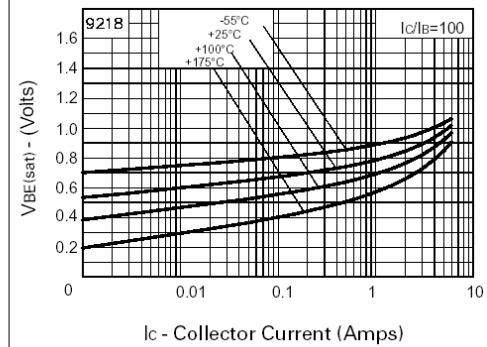
VCE(sat) v IC



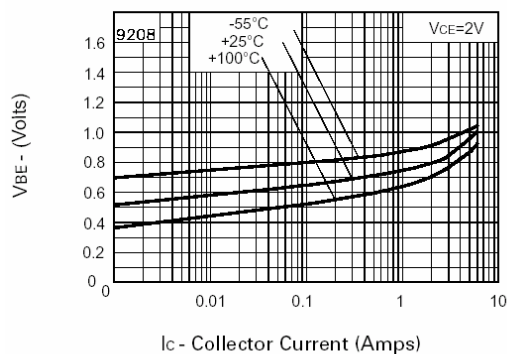
VCE(sat) v IC



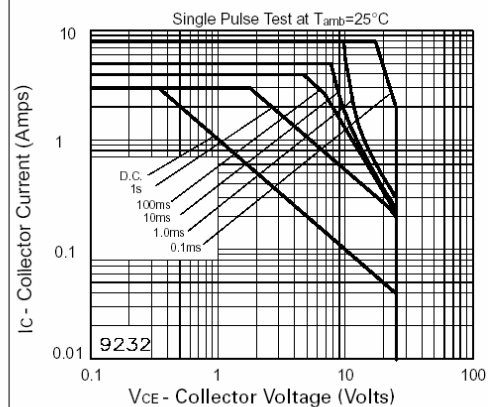
hFE v IC



VBE(sat) v IC



VBE(on) v IC



Safe Operating Area