

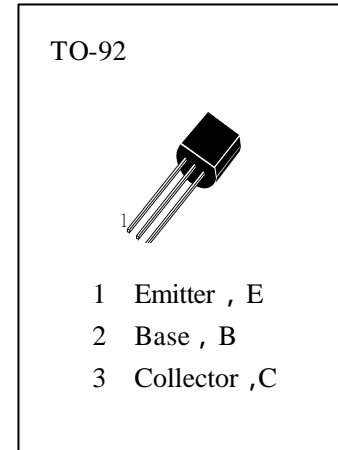


**APPLICATIONS**

Motor drivers.

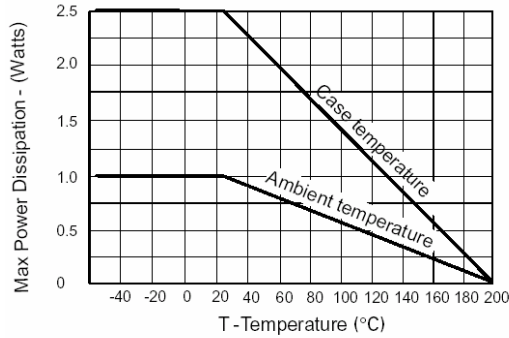
**ABSOLUTE MAXIMUM RATINGS (  $T_a=25$  )**

$T_{stg}$	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

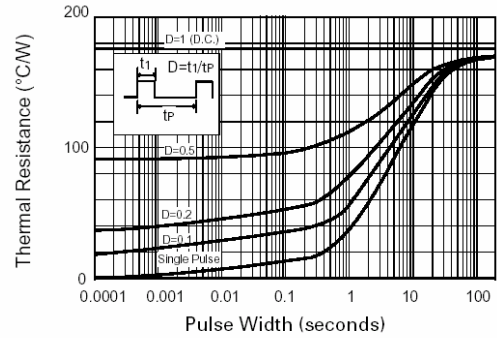


**ELECTRICAL CHARACTERISTICS (  $T_a=25$  )**

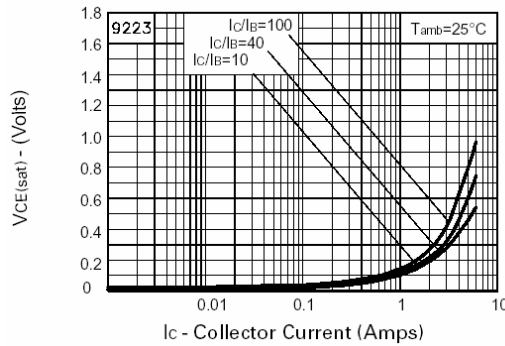
Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
$BV_{CBO}$	Collector-Base Breakdown Voltage	-25			V	$I_C=-100 \mu A, I_E=0$
$BV_{CEO}$	Collector-Emitter Breakdown Voltage	-25			V	$I_C=-10mA, I_B=0$
$BV_{EBO}$	Emitter-Base Breakdown Voltage	-5			V	$I_E=-100 \mu A, I_C=0$
$I_{CBO}$	Collector Cut-off Current			-0.1	$\mu A$	$V_{CB}=-15V, I_E=0$
$I_{EBO}$	Emitter Cut-off Current			-0.1	$\mu A$	$V_{EB}=-4V, I_C=0$
$H_{FE}$	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	$V_{CE}=-2V, I_C=-1A$
$f_T$	Current Gain-Bandwidth Product	100			MHz	$V_{CE}=-5V, I_C=-50mA, f=50MHz$
$C_{ob}$	Output Capacitance		25		pF	$V_{CB}=-10V, I_E=0, f=1MHz$



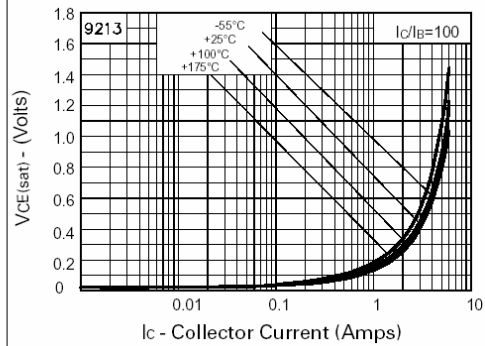
**Derating curve**



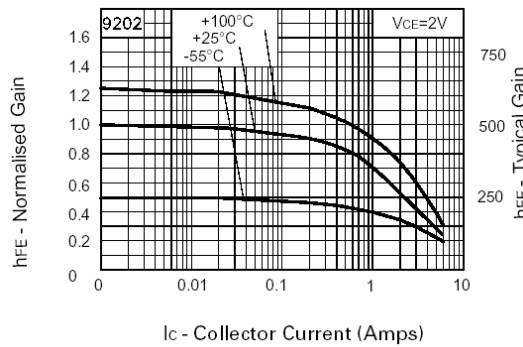
**Maximum transient thermal impedance**



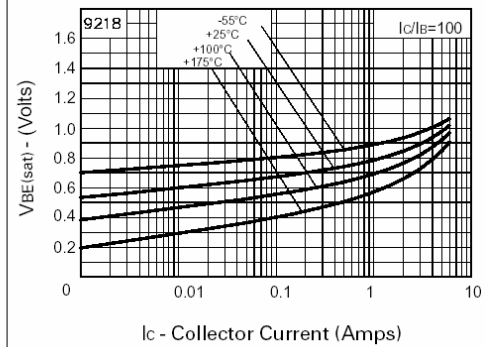
**VCE(sat) v IC**



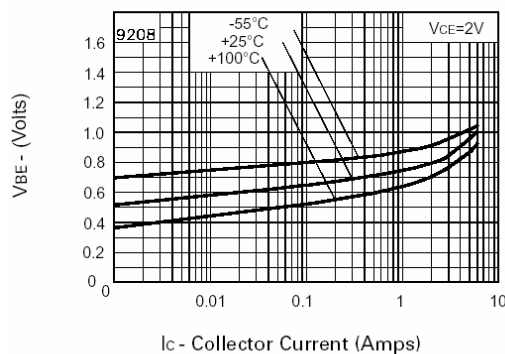
**VCE(sat) v IC**



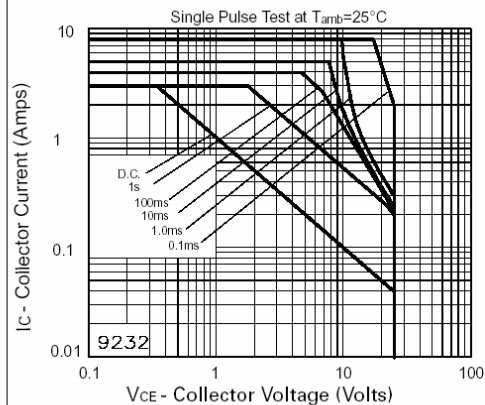
**hFE v IC**



**VBE(sat) v IC**



**VBE(on) v IC**



**Safe Operating Area**