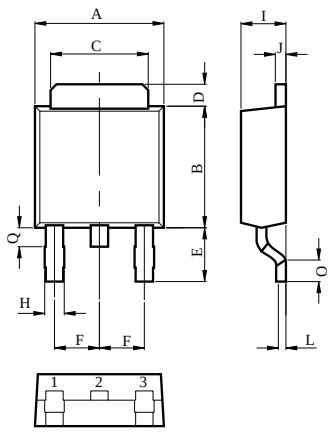
Power Amplifier Applications
Driver Stage Amplifier Applications

- High transition frequency: f_T = 100 MHz (typ.)
- Complementary to FTC2983



DIM	MILLIMETERS
A	6 50 ± 0 2
B	5 60 ± 0 2
C	5 20 ± 0 2
D	1 50 ± 0 2
E	2 70 ± 0 2
F	2 30 ± 0 1
H	1 00 MAX
I	2 30 ± 0 2
J	0 5 ± 0 1
L	0 50 ± 0 10
O	1 6 ± 0 2
Q	0 95 MAX

1 BASE
2 COLLECTOR
3 EMITTER

DPAK

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-160	V
V_{CEO}	Collector-Emitter Voltage	-160	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-1.5	A
P_C	Collector Power Dissipation	1	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

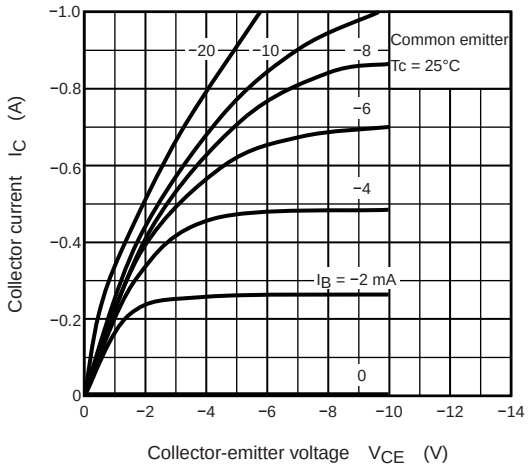
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-1mA ,I_E=0	-160			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$*	I_C=-10mA, I_B=0	-160			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-1mA,I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=160V,I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V,I_C=0			-0.1	μA
DC current gain	h_{FE}	V_{CE}=-5V, I_C=-0.1A	70		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-0.5A,I_B=-50mA			-1.5	V
Base-emitter voltage	V_{BE}	V_{CE}=-5V, I_C=-0.5A			-1	V
Transition frequency	f_T	V_{CE}=-10V ,I_C=-100mA		100		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V ,I_E=0,f=1MHz		30		pF

* Pulse test

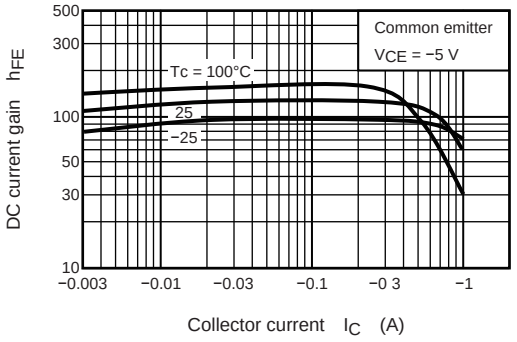
CLASSIFICATION OF h_{FE}

RANK	O	Y
RANGE	70-140	120-240

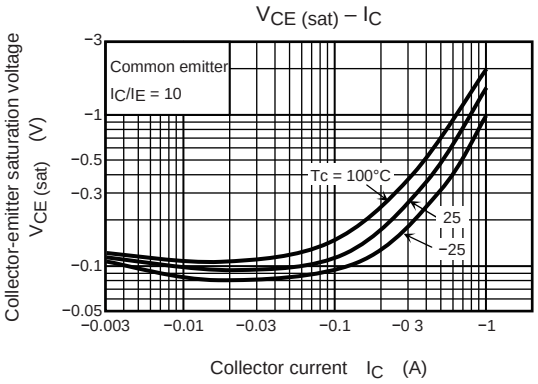
$I_C - V_{CE}$



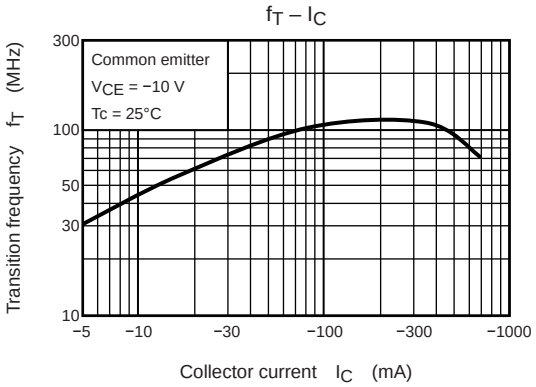
$h_{FE} - I_C$



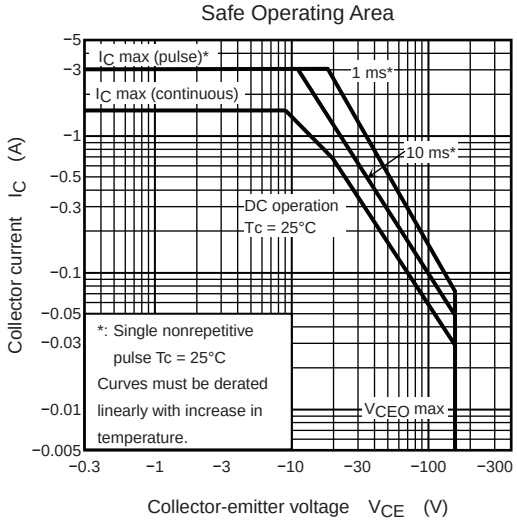
$V_{CE\ (sat)} - I_C$



$f_T - I_C$



Safe Operating Area



$P_C - Ta$