

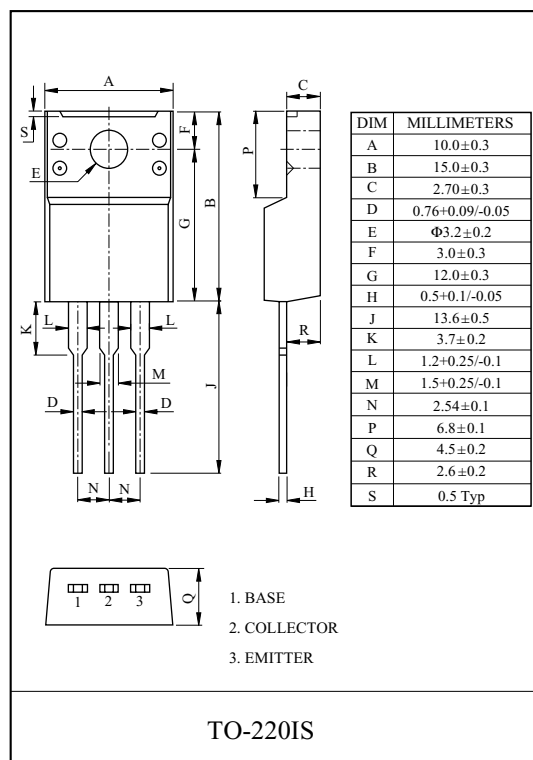
GENERAL PURPOSE APPLICATION.

FEATURES

- Low Collector-Emitter Saturation Voltage
: $V_{CE(sat)}=2.0V(\text{Max.})$.

MAXIMUM RATING (Ta=25)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	130	V
Collector-Emitter Voltage	V_{CEO}	100	V
	V_{CES}	130	V
Emitter-Base Voltage	V_{EBO}	8	V
Collector Current	I_C	5	A
	I_{CP}	10	A
Base Current	I_B	0.5	A
Collector Power Dissipation (Tc=25)	P_C	30	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

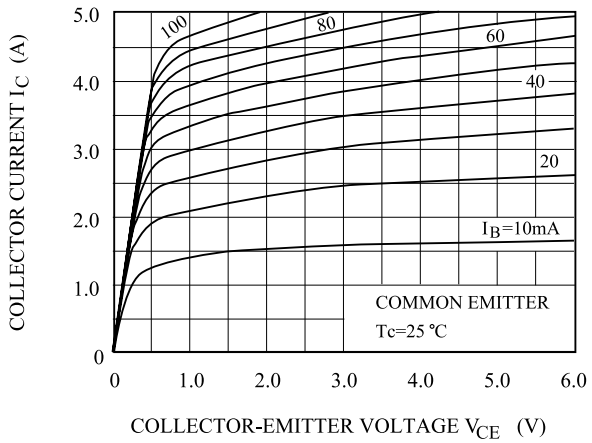


ELECTRICAL CHARACTERISTICS (Ta=25)

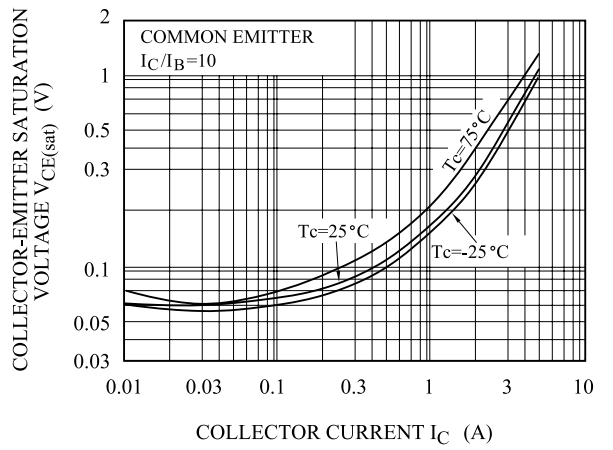
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=130V, I_E=0$	-	-	10	μA
	I_{CEO}	$V_{CE}=60V, I_B=0$	-	-	1.5	
Emitter Cut-off Current	I_{EBO}	$V_{EB}=8V, I_C=0$	-	-	1.0	mA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=50mA, I_B=0$	100	-	-	V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5V, I_C=1mA$	35	-	-	
	$h_{FE(2)}(\text{Note})$	$V_{CE}=5V, I_C=1A$	120	-	240	
	$h_{FE(3)}$	$V_{CE}=5V, I_C=4A$	20	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=4A, I_B=0.4A$	-	-	2.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=5V, I_C=1A$	-	-	1.5	V
Transition Frequency	f_T	$V_{CE}=5V, I_C=1A$	-	30	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	40	-	pF

Note : $h_{FE(2)}$ Classification Y : 120~240

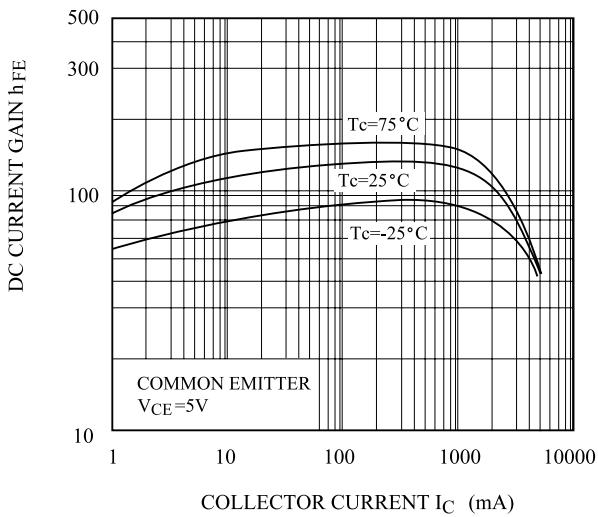
$I_C - V_{CE}$



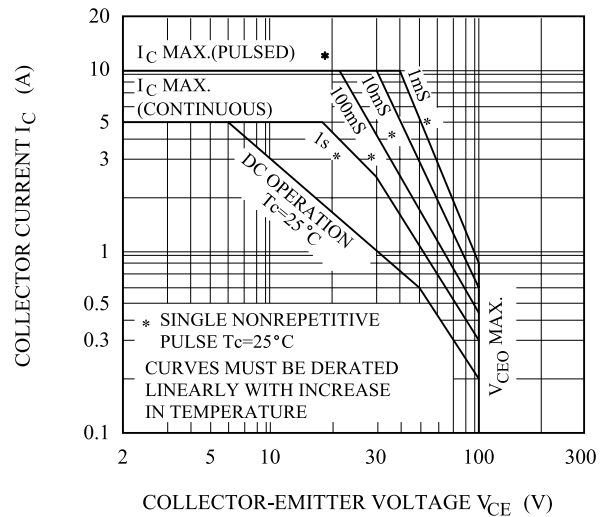
$V_{CE(sat)} - I_C$



$h_{FE} - I_C$



SAFE OPERATING AREA



$P_c - T_a$

