

HIGH VOLTAGE APPLICATION.

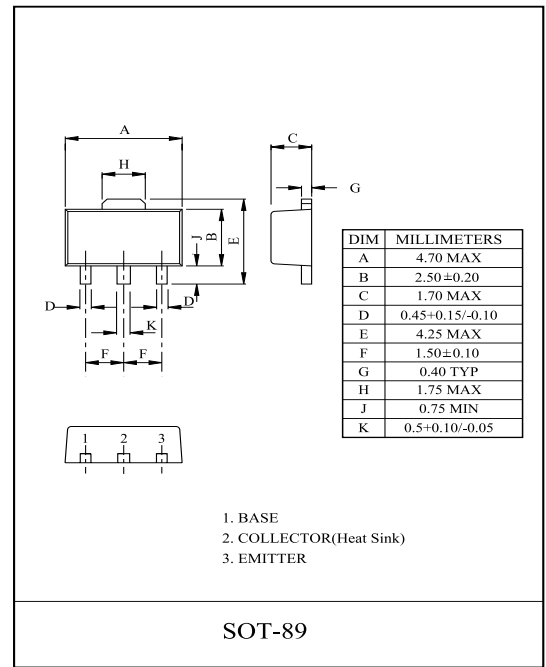
FEATURES

- High Breakdown Voltage.

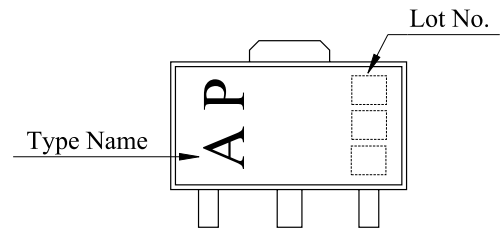
MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	500	V
Collector-Emitter Voltage	V_{CEO}	400	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	300	mA
Collector Power Dissipation	P_C	500	mW
	P_C^*	1	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

* : Mounted on ceramic substrate(250mm² × 0.8t)



Marking



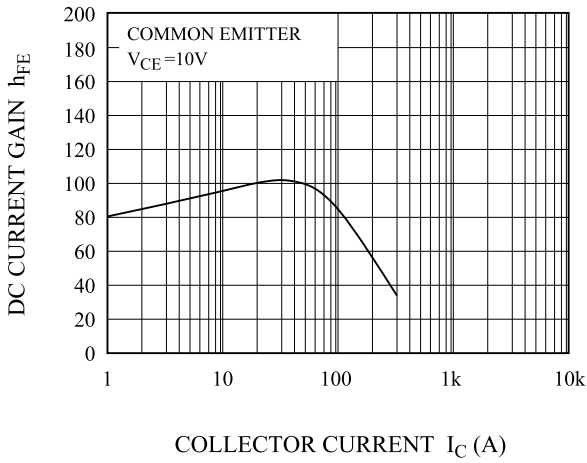
ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=100 \mu A, I_E=0$	500	-	-	V
Collector-Emitter Breakdown Voltage (1)	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	400	-	-	V
Collector-Emitter Breakdown Voltage (2)	$V_{(BR)CES}$	$I_C=100 \mu A, I_B=0$	400	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10 \mu A, I_C=0$	6.0	-	-	V
Collector Cut off Current (1)	I_{CBO}	$V_{CB}=400V, I_E=0$	-	-	100	nA
Collector Cut off Current (2)	I_{CES}	$V_{CE}=400V, I_B=0$	-	-	500	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=4V, I_C=0$	-	-	100	nA
DC Current Gain *	h_{FE}	$V_{CE}=10V, I_C=1mA$	40	-	-	
		$V_{CE}=10V, I_C=10mA$	50	-	200	
		$V_{CE}=10V, I_C=50mA$	45	-	-	
		$V_{CE}=10V, I_C=100mA$	40	-	-	
Collector-Emitter Saturation Voltage *	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$	-	-	0.5	V
Base-Emitter Saturation Voltage *	$V_{BE(sat)}$	$I_C=10mA, I_B=1mA$	-	-	0.75	V

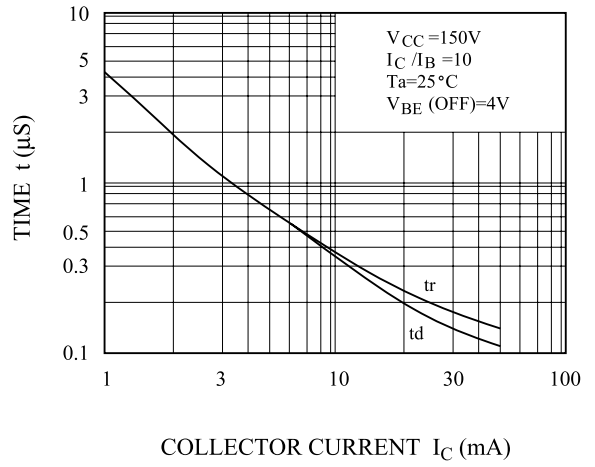
*Pulse Test : Pulse Width 300 μs, Duty Cycle 2.0%

PXTA44

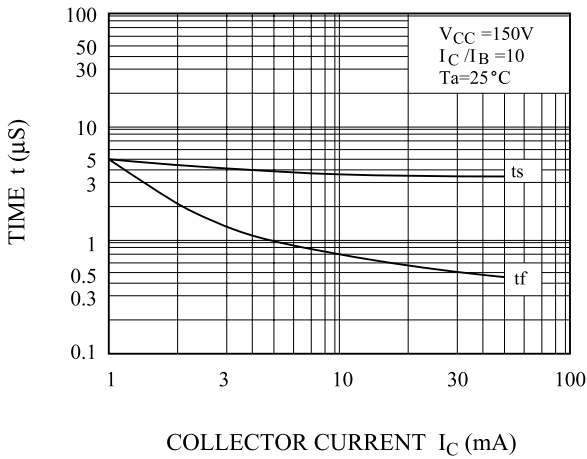
$h_{FE} - I_C$



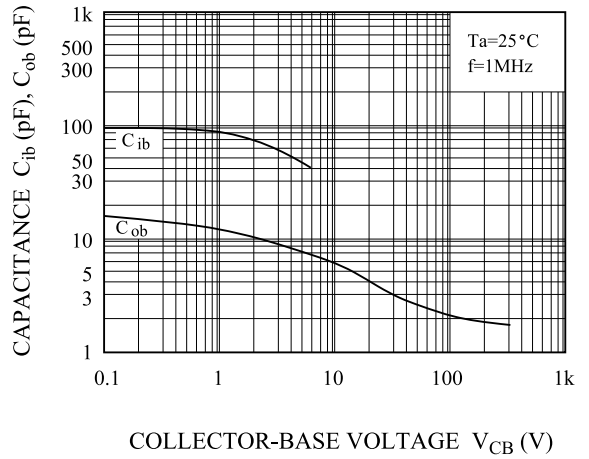
TURN-ON SWITCHING CHARACTERISTICS



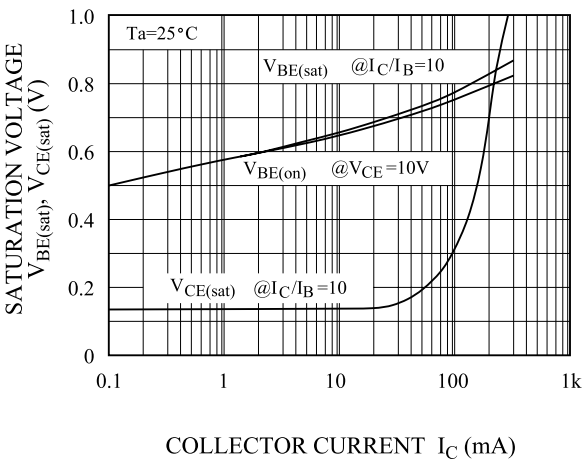
TURN-OFF SWITCHING CHARACTERISTICS



$C_{ib}, C_{ob} - V_{CB}$



$V_{BE(sat)}, V_{CE(sat)} - I_C$



COLLECTOR SATURATION REGION

