S1377

SILICON NPN TRIPLE DIFFUSED TYPE (PCT PROCESS)

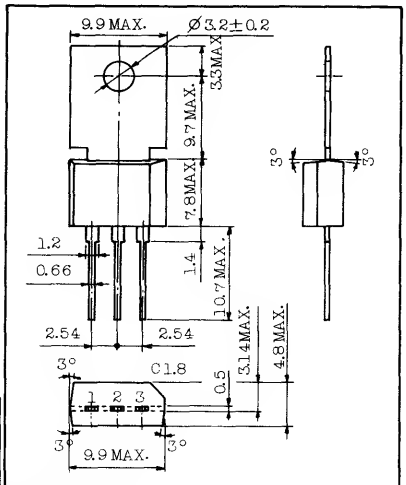
MEDIUM POWER AMPLIFIER APPLICATIONS.
TV HORIZONTAL DRIVER APPLICATIONS.

FEATURES:

. High Collector to Emitter Breakdown Voltage

V_{CEO}=250V

Unit in mm



1. EMITTER
2. BASE
3. COLLECTOR(HEAT SINK)

JEDEC	—
EIAJ	—
TOSHIBA	2-10D1A

Weight : 1.4g

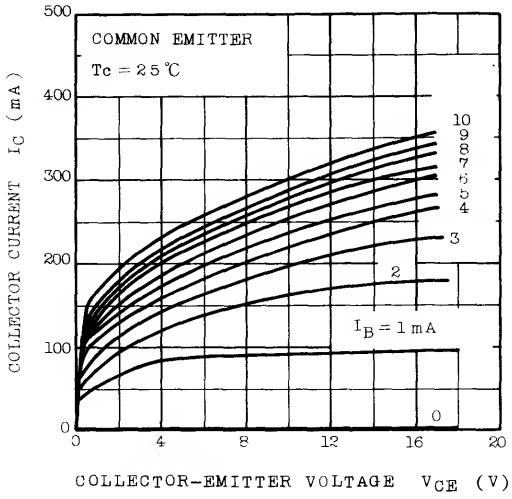
MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	250	V
Collector-Emitter Voltage		V_{CEO}	250	V
Emitter-Base Voltage		V_{EBO}	6	V
Collector Current		I_C	500	mA
Base Current		I_B	250	mA
Collector Power Dissipation	Ta=25°C	P_C	1.5	W
	Tc=25°C		6.25	
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55 ~ 150	°C

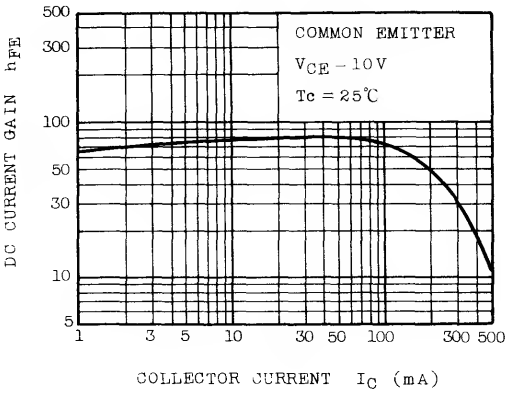
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=250V, I_E=0	-	-	10	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=6V, I_C=0	-	-	10	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=5mA, I_B=0	250	-	-	V
DC Current Gain	h_{FE}	V_{CE}=10V, I_C=100mA	30	-	200	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=200mA, I_B=20mA	-	-	3	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=200mA, I_B=20mA	-	-	1.2	V
Transition Frequency	f_T	V_{CE}=10V, I_C=100mA	40	60	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=20V, I_E=0, f=1MHz	-	-	7	pF

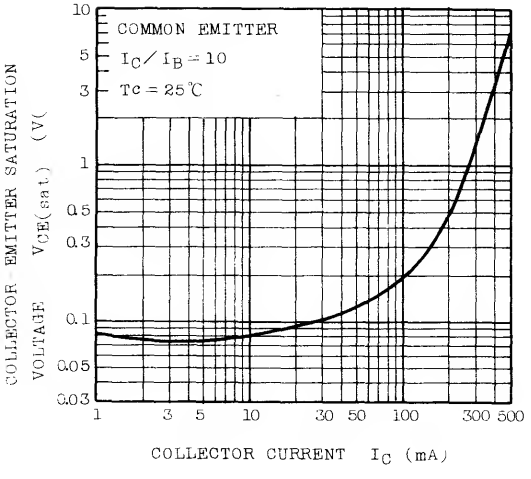
$I_C - V_{CE}$



$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



SAFE OPERATING AREA