S1375

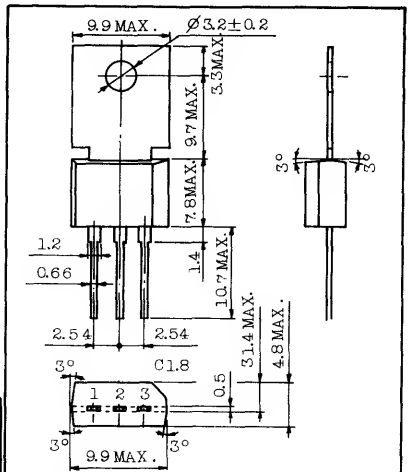
SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

MEDIUM POWER AMPLIFIER APPLICATIONS.
DRIVER STAGE AMPLIFIER APPLICATIONS.

FEATURES:

. Complementary to S1376

Unit in mm



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

JEDEC	—
EIAJ	—
TOSHIBA	2-10D1A

Weight : 1.4g

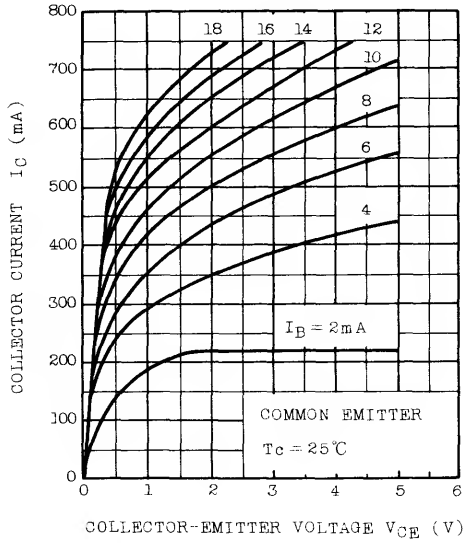
MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	80	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	750	mA
Base Current	I_B	500	mA
Collector Power Dissipation	P_C	1.5	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	−55 ~ 150	°C

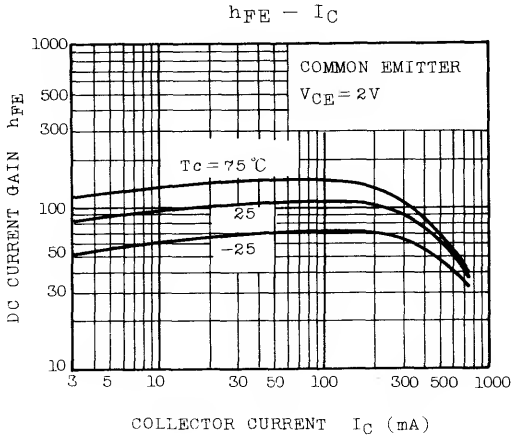
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=30V, I_E=0	–	–	0.5	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=5V, I_C=0	–	–	1.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=10mA, I_B=0	80	–	–	V
DC Current Gain	$h_{FE(1)}$	V_{CE}=2V, I_C=150mA	70	–	240	
	$h_{FE(2)}$	V_{CE}=2V, I_C=500mA	40	–	–	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=500mA, I_B=50mA	–	–	0.5	V
Base-Emitter Voltage	V_{BE}	V_{CE}=2V, I_C=500mA	–	–	1.0	V
Transition Frequency	f_T	V_{CE}=2V, I_C=150mA	50	100	–	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V, I_E=0, f=1MHz	–	15	–	pF

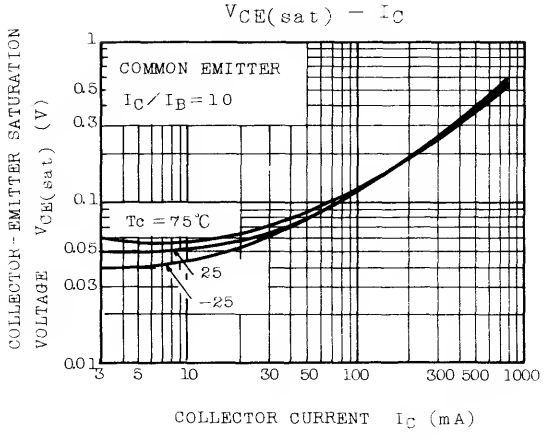
$I_C - V_{CE}$



$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$I_C - V_{BE}$