TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

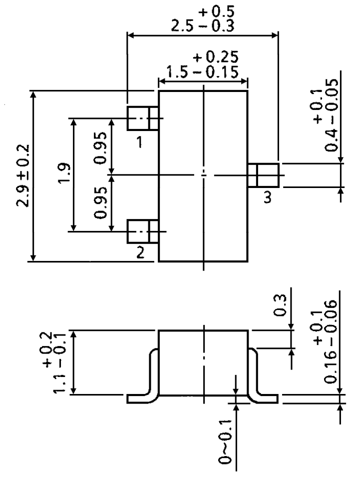
2SC3265

LOW FREQUENCY POWER AMPLIFER APPLICATIONS

POWER SWITCHING APPLICATIONS

- High DC Current Gain : $h_{FE(1)} = 100\sim320$
- Low Saturation Voltage : $V_{CE(sat)} = 0.4\,V$ (Max.)
  ($I_C = 500\,mA$, $I_B = 20\,mA$)
- Complementary to 2SA1298

Unit in mm



1. BASE
2. EMITTER
3. COLLECTOR

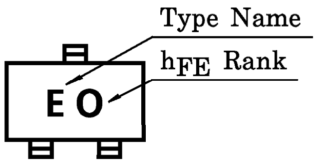
S-MINI	
JEDEC	TO-236MOD
EIAJ	SC-59
TOSHIBA	2-3F1A

Weight : 0.012 g

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	800	mA
Base Current	I_B	160	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	−55~150	°C

MARKING



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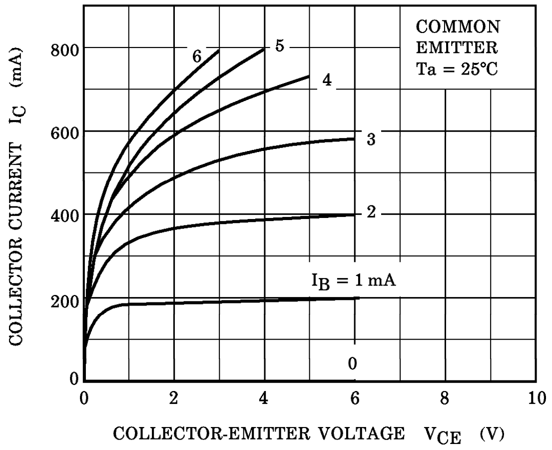
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

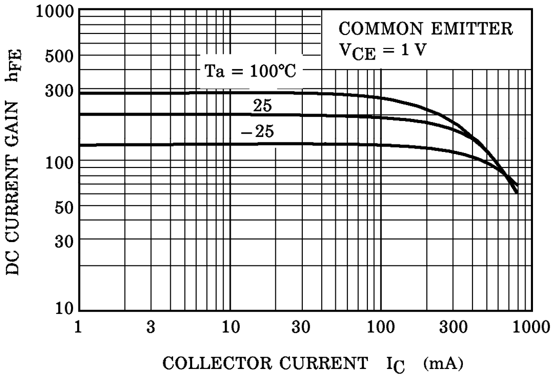
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 30\,V$, $I_E = 0$	—	—	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5\,V$, $I_C = 0$	—	—	0.1	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)\,CEO}$	$I_C = 10\,mA$, $I_B = 0$	25	—	—	V
Emitter-Base Breakdown Voltage	$V_{(BR)\,EBO}$	$I_E = 0.1\,mA$, $I_C = 0$	5	—	—	V
DC Current Gain	$h_{FE\,(1)}$ (Note)	$V_{CE} = 1\,V$, $I_C = 100\,mA$	100	—	320	
	$h_{FE\,(2)}$	$V_{CE} = 1\,V$, $I_C = 800\,mA$	40	—	—	
Collector-Emitter Saturation Voltage	$V_{CE\,(sat)}$	$I_C = 500\,mA$, $I_B = 20\,mA$	—	—	0.4	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 1\,V$, $I_C = 10\,mA$	0.5	—	0.8	V
Transition Frequency	f_T	$V_{CE} = 5\,V$, $I_C = 10\,mA$	—	120	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10\,V$, $I_E = 0$, $f = 1\,MHz$	—	13	—	pF

Note : $h_{FE\,(1)}$ Classification O : 100~200, Y : 160~320

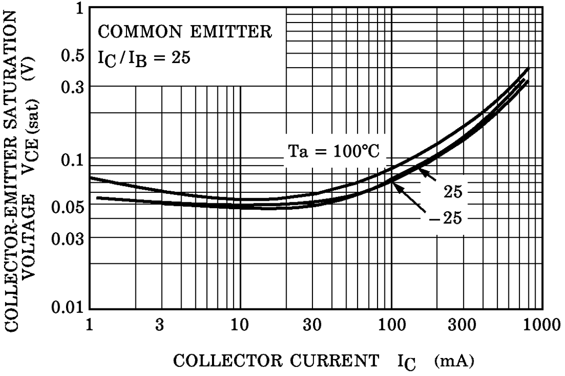
I_C – V_{CE}



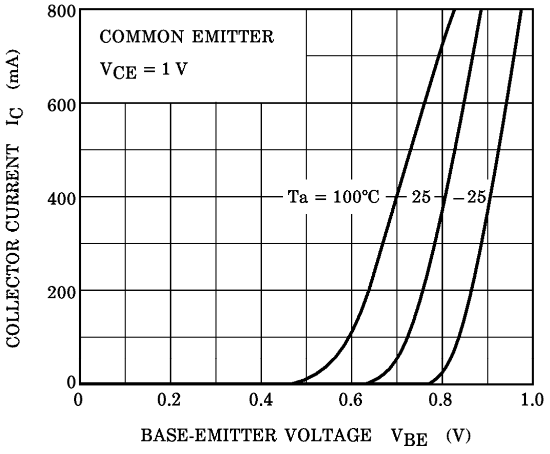
h_{FE} – I_C



$V_{CE\,(sat)}$ – I_C



I_C – V_{BE}



P_C – Ta