

9097250 TOSHIBA (DISCRETE/OPTO)

56C 08016 07-33-13

SILICON NPN TRIPLE DIFFUSED TYPE

2N3715

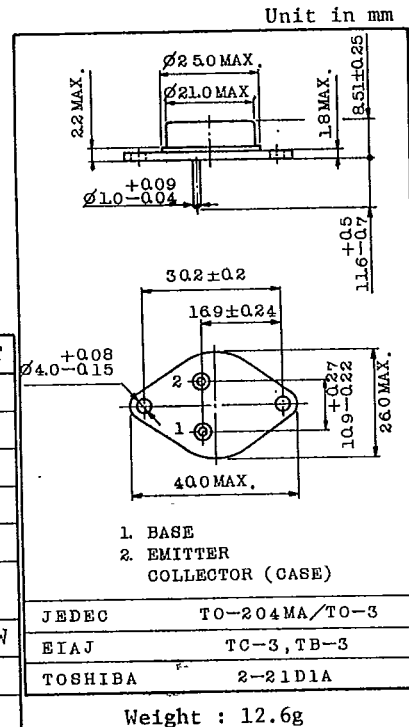
GENERAL PURPOSE POWER TRANSISTOR.
POWER REGULATOR, SWITCHING AND SOLENOID DRIVES
APPLICATIONS.

FEATURES:

- High Gain at High Current
- Low Saturation Voltage : $V_{CE(sat)}=0.8V$ (Max.)
@ $I_C=5A$, $I_B=0.5A$
- Excellent Area of Safe Operatings

MAXIMUM RATINGS ($T_a=25^\circ C$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
* Collector-Base Voltage	V_{CBO}	80	V
* Collector-Emitter Voltage	V_{CEO}	60	V
* Emitter-Base Voltage	V_{EBO}	7	V
* Collector Current	I_C	10	A
* Base Current	I_B	4	A
* Collector Power Dissipation ($T_c=25^\circ C$)	P_C	150	W
* Thermal Resistance	θ_{jc}	1.17	$^\circ C/W$
* Junction Temperature	T_j	200	$^\circ C$
* Storage Temperature Range	T_{stg}	-65 ~ 200	$^\circ C$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
* Collector Cut-off Current	I_{CEX}	$V_{CE}=80V$, $V_{BE}=-1.5V$	-	-	1	mA	
* Collector Cut-off Current	I_{CEX}	$V_{CE}=60V$, $V_{BE}=-1.5V$ $T_c=150^\circ C$	-	-	10	mA	
* Emitter Cut-off Current	I_{EBO}	$V_{EB}=7V$, $I_C=0$	-	-	5	mA	
* Collector-Emitter Sustaining Voltage	$V_{CEO(SUS)}$	$I_C=200mA$, $I_B=0$	60	-	-	V	
* DC Current Gain	h_{FE}	$V_{CE}=2V$, $I_C=1A$	50	-	150		
		$V_{CE}=2V$, $I_C=3A$	30	-	-		
* Base-Emitter Voltage	V_{BE}	$V_{CE}=2V$, $I_C=3A$	-	-	1.5	V	
Saturation Voltage	Collector-Emitter	$V_{CE(sat)}$	$I_C=5A$, $I_B=0.5A$	-	-	0.8	V
	Base-Emitter	$V_{BE(sat)}$	$I_C=5A$, $I_B=0.5A$	-	-	1.5	V
Small Signal Forward Current Transfer Ratio	$ h_{fe} $	$V_{CE}=10V$, $I_C=0.5A$ $f=1MHz$	4	-	-		

* In accordance with JEDEC registration data.

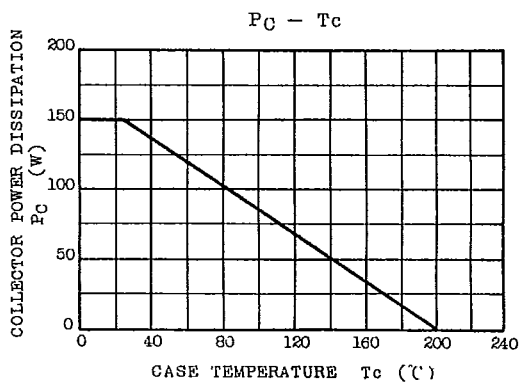
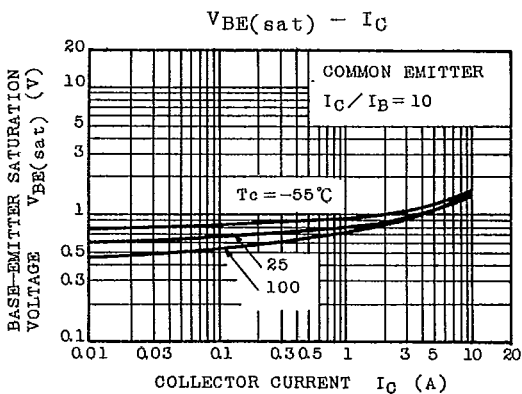
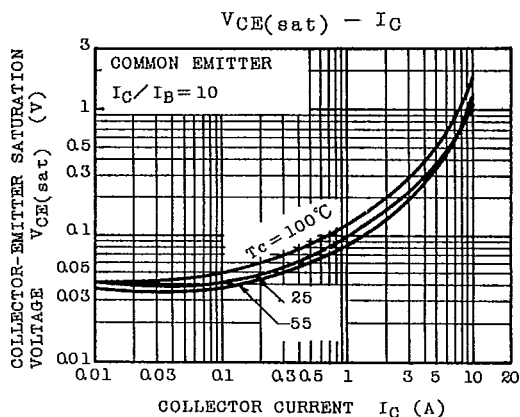
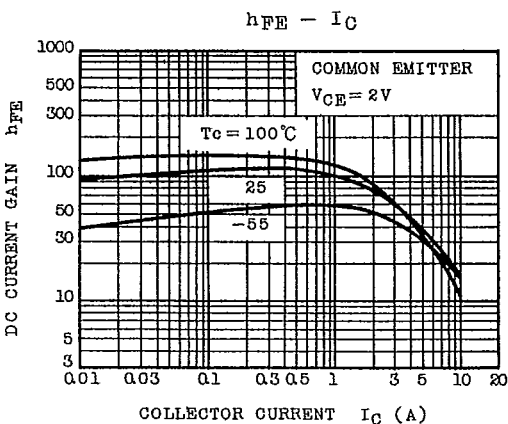
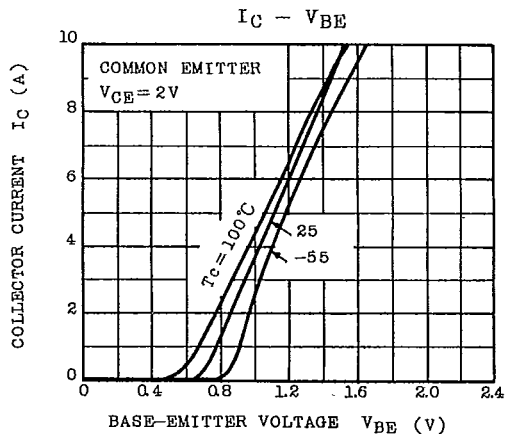
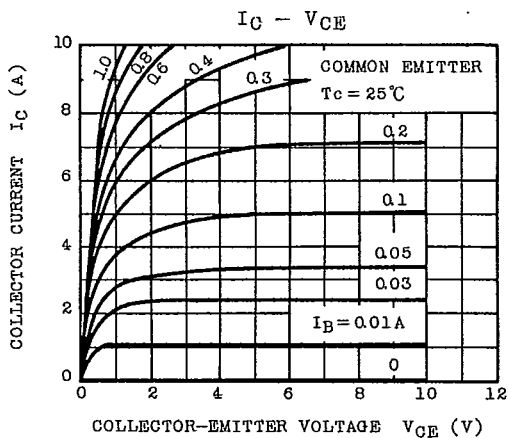
** The sustaining voltage $V_{CEO(SUS)}$ MUST NOT be measured on a curve tracer.

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