

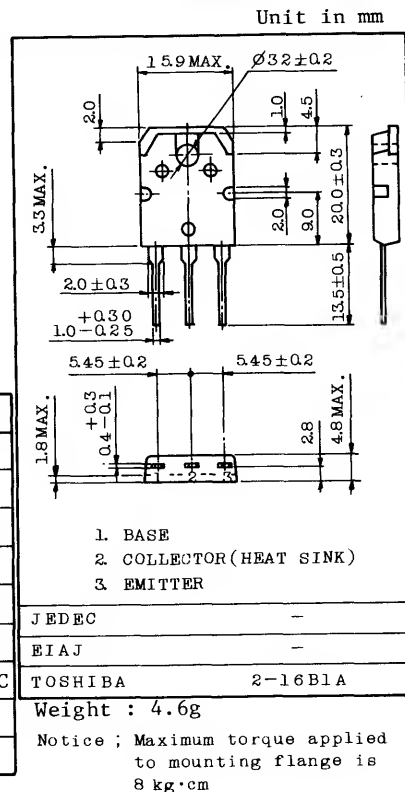
GENERAL PURPOSE TRANSISTOR
POWER REGULATOR, SWITCHING AND SOLENOID
DRIVE APPLICATIONS.

FEATURES:

- Convenient MOLD Package : Useless Insulation Bushing
- High Gain at High Current
: $h_{FE}=20\sim100$ @ $V_{CE}=4V$, $I_C=4A$
- Low Saturation Voltage
: $V_{CE(sat)} < 1.1V$ @ $I_C=4A$, $I_B=0.4A$

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

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	10	A
Base Current	I_B	6	A
Collector Power Dissipation ($T_c=25^\circ C$) Derate above $25^\circ C$	P_C	70	W
		0.56	W/ $^\circ C$
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ C$

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CEX}	$V_{CE}=80V$, $V_{BE}=-1.5V$	-	-	1.0	mA
Collector Cut-off Current	I_{CEO}	$V_{CE}=80V$, $I_B=0$	-	-	0.7	mA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V$, $I_C=0$	-	-	5	mA
Collector-Emitter Sustaining Voltage	$V_{CEO(SUS)}^*$	$I_C=200mA$, $I_B=0$	80	-	-	V
DC Current Gain	h_{FE}	$V_{CE}=4V$, $I_C=4A$	20	-	100	
		$V_{CE}=4V$, $I_C=10A$	5	-	-	
Base-Emitter Voltage	V_{BE}	$V_{CE}=4V$, $I_C=4A$	-	-	1.8	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=4A$, $I_B=0.4A$	-	-	1.1	V
		$I_C=10A$, $I_B=3.3A$	-	-	8.0	
Transition Frequency	f_T	$V_{CE}=10V$, $I_C=0.5A$, $f=1MHz$	3.0	8.0	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V$, $I_E=0$, $f=1MHz$	-	70	-	pF

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

