SILICON NPN TRIPLE DIFFUSED MESA TYPE

BU326A

HIGH POWER SWITCHING REGULATOR APPLICATIONS.

FEATURES:

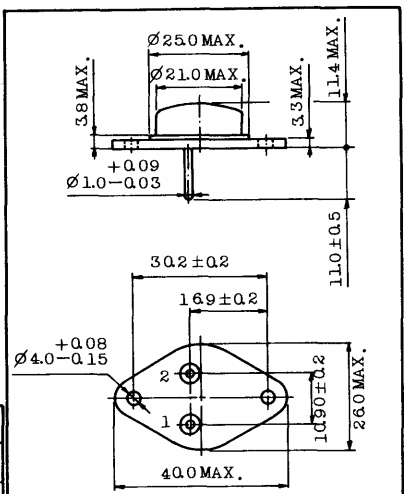
. High Voltage : V_{CBO}=900V

. High Peak Current Capability : $I_{C(Peak)}$=8A

. Fall Time : t_f=0.5μs (Max.)

. Glass Passivated Collector-Base Junction.

Unit in mm



1. BASE
2. EMITTER
COLLECTOR (CASE)

JEDEC	TO−3
EIAJ	TC−3, TB−3
TOSHIBA	2−21B1A

Mounting Kit No. AC42C

Weight : 17.0g

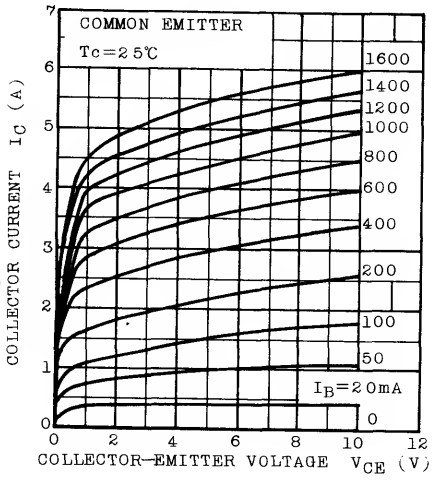
MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	900	V
Collector-Emitter Voltage		V_{CEO}	400	V
Emitter-Base Voltage		V_{EBO}	7	V
Collector Current	DC	I_C	6	A
	Peak	I_{CP}	8	A
Collector Power Dissipation (Tc=25°C)		P_C	60	W
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	−65 ~ 150	°C

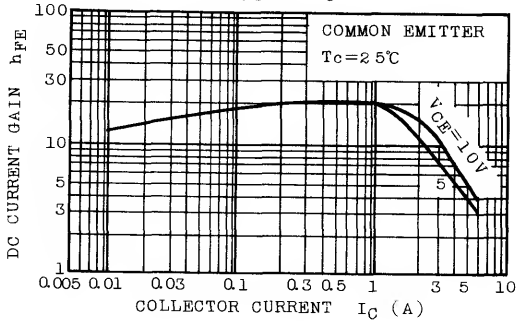
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=1mA, I_E=0	900	−	−	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=10mA, I_B=0	400	−	−	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=5mA, I_C=0	7	−	−	V
DC Current Gain	h_{FE}	V_{CE}=5V, I_C=4A	3.5	−	12	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=4A, I_B=1.25A	−	−	3	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=4A, I_B=1.25A	−	−	1.5	V
Fall Time	t_f	I_{CP}=2.5A, I_{B1}=0.5A I_{B2}=−1A	−	−	0.5	μs
Transition Frequency	f_T	V_{CE}=10V, I_C=0.1A	−	5	−	MHz

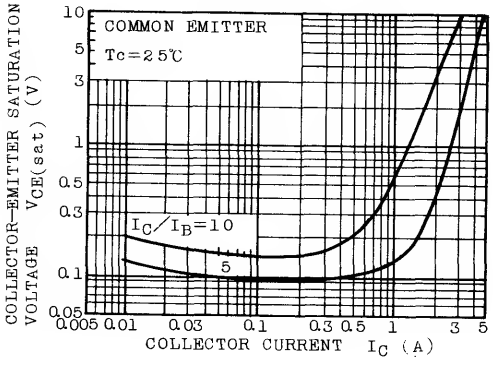
$I_C - V_{CE}$



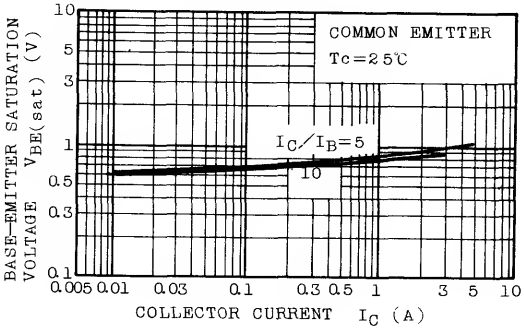
$h_{FE} - I_C$



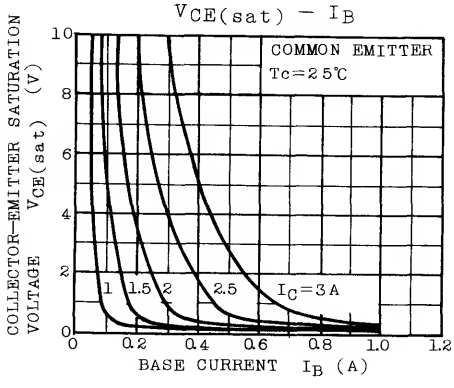
$V_{CE(sat)} - I_C$



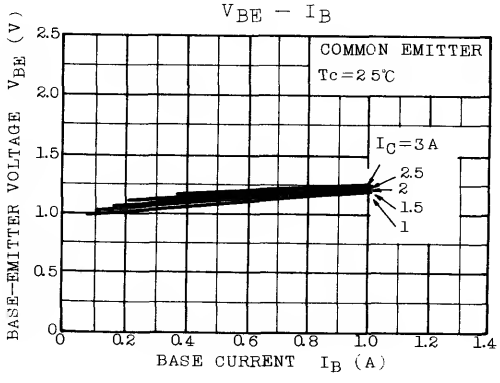
$V_{BE(sat)} - I_C$



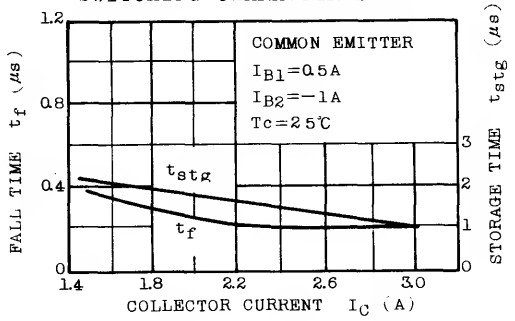
$V_{CE(sat)} - I_B$



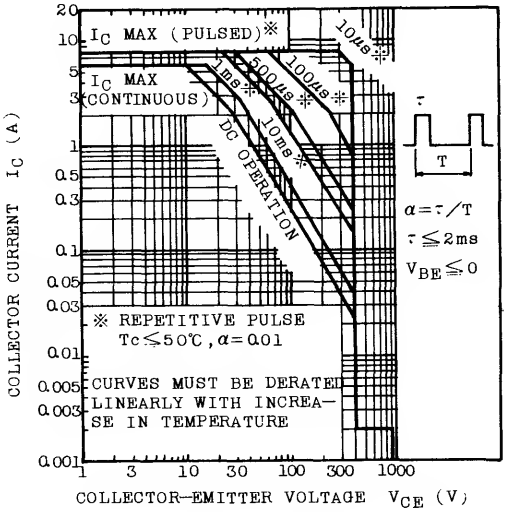
$V_{BE} - I_B$



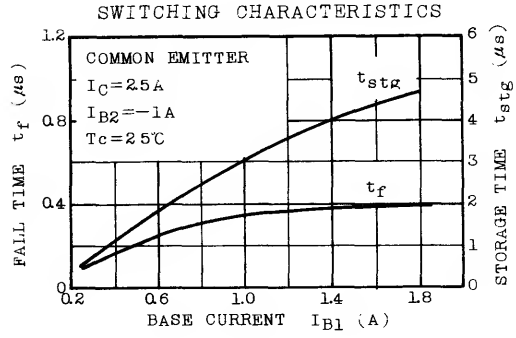
SWITCHING CHARACTERISTICS



SAFE OPERATING AREA



SWITCHING CHARACTERISTICS



SWITCHING CHARACTERISTICS