

2SD867

SILICON NPN TRIPLE DIFFUSED TYPE

HIGH POWER AMPLIFIER APPLICATIONS.
 HIGH POWER SWITCHING APPLICATIONS.
 DC-DC CONVERTER APPLICATIONS.
 REGULATOR APPLICATIONS.

FEATURES:

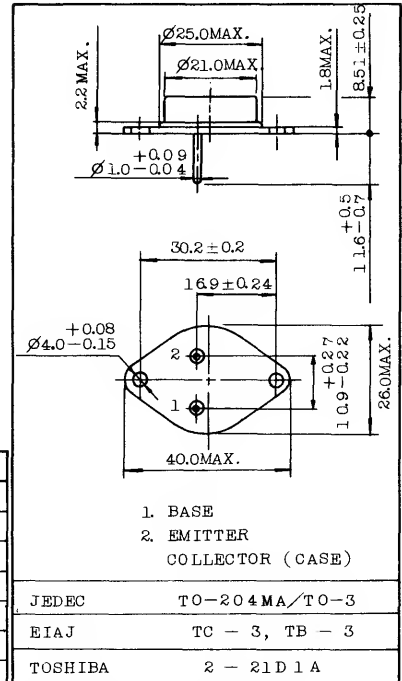
- High Power Dissipation : $F_C=100W(T_c=25^\circ C)$
- High Collector Current : $I_C=10A$
- Low Saturaton Voltage : $V_{CE(sat)}=0.5V$ (Typ.) ($I_C=5A$)

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

CHARACTERISTICS	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	130	V
Collector-Emitter Voltage	V_{CE0}	110	V
Emitter-Base Voltage	V_{EB0}	7	V
Collector Current	I_C	10	A
Base Current	I_B	5	A
Collector Power Dissipation ($T_c=25^\circ C$)	P_C	100	W
Junction Temperature	T_j	175	$^\circ C$
Storage Temperature Range	T_{stg}	-65~175	$^\circ C$

INDUSTRIAL APPLICATIONS

Unit in mm



Mounting Kit No. AC73

Weight : 12.6g

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

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB}=130V, I_E=0$	-	-	100	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB}=7V, I_C=0$	-	-	100	μA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C=50mA, I_B=0$	110	-	-	V
DC Current Gain		$h_{FE(1)}$ (Note)	$V_{CE}=5V, I_C=1A$	50	-	200	
		$h_{FE(2)}$	$V_{CE}=5V, I_C=5A$	20	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C=5A, I_B=1A$	-	0.5	1.5	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$		-	1.2	2.5	V
Transition Frequency		f_T	$V_{CE}=5V, I_C=1A$	-	1.5	-	MHz
Collector Output Capacitance		C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	200	-	pF
Switching Time	Turn-on Time	t_{on}		-	2.5	-	μs
	Storage Time	t_{stg}		-	4.0	-	
	Fall Time	t_f		$I_{B1} = -I_{B2} = 0.5A$ DUTY CYCLE $\leq 1\%$	-	1.2	

Note : $h_{FE(1)}$ Classification 0 : 50~120, Y : 100~200

