2N6322 AND 2N6324
30 AMP NPN
HIGH VOLTAGE/HIGH ENERGY
200 VOLTS

SSDI
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La Mirada, California 90638
(213) 921-9660
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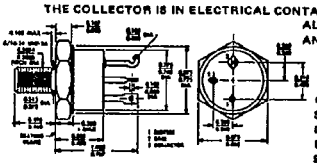
T-33-15

2N6324

THE COLLECTOR IS IN ELECTRICAL CONTACT WITH THE CASE
ALL JEDEC TO-63 DIMENSIONS AND NOTES ARE APPLICABLE

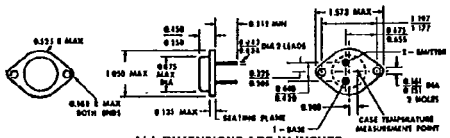


CASE TEMPERATURE MEASUREMENT POINT IS UNDERSIDE OF FLAT SURFACE WITHIN 0.125" FROM STUD

ALL DIMENSIONS ARE IN INCHES

2N6322

THE COLLECTOR IS IN ELECTRICAL CONTACT WITH THE CASE
ALL JEDEC TO-3 DIMENSIONS AND NOTES ARE APPLICABLE



ALL DIMENSIONS ARE IN INCHES

FEATURES

- MINIMUM BVCEO 200V
- MINIMUM UNCLAMPED ES/B 100mJ
- 200 WATTS AT 100°C CASE TEMPERATURE
- 30 AMP CONTINUOUS COLLECTOR CURRENT
- 200°C OPERATING, GOLD EUTECTIC DIE ATTACH

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector - Emitter Voltage	V_{CEO}	200	Volts
Collector - Base Voltage	V_{CBO}	300	Volts
Emitter - Base Voltage	V_{EBO}	5	Volts
Collector Current	I_C	30	Amps
Base Current	I_B	10	Amps
Total Device Dissipation @ TC = 100 °C Derate above 100 °C	P_D	200	Watts mW/°C
Operating and Storage Temperature	Tj, Tstg	-65 to +200	°C

THERMAL CHARACTERISTICS

Characteristics	Symbol	Value	Unit
Thermal Resistance, Junction to Case	RθJC	0.5	°C/W

ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Min.	Max.	Unit
Collector - Emitter Breakdown Voltage* (I_C = 30 mAdc)	BV_{CEO}*	200		Vdc
Collector - Base Breakdown Voltage (I_C = 20 uAdc)	BV_{CBO}	300		Vdc
Emitter - Base Breakdown Voltage (I_E = 20 uAdc)	BV_{EBO}	5		Vdc

1/86 B2274/B3574

NOTE: All specifications subject to change without notice.

ELECTRICAL CHARACTERISTICS

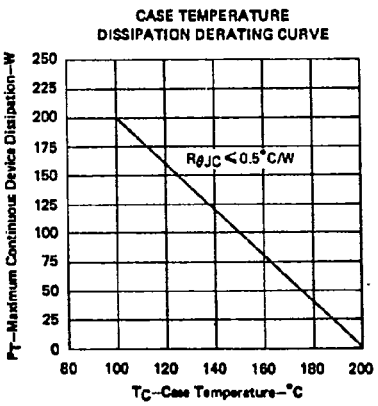
Characteristics	Symbol	Min.	Max.	Unit
Collector Cutoff Current V_{CE} = 300V V_{BE} = 0V	I_{CES}		2	mAdc
Collector Cutoff Current (V_{CE} = 100V)	I_{CEO}		5	mAdc
Emitter Cutoff Current (V_{EB} = 5V)	I_{EBO}		5	mAdc
DC Current Gain* (I_C = 5 Adc, V_{CE} = 5 Vdc) (I_C = 20 Adc, V_{CE} = 5 Vdc) (I_C = 30 Adc, V_{CE} = 5 Vdc)	h_{FE}*	40 12 6	150	
Collector - Emitter Saturation Voltage* (I_C = 20 Adc, I_B = 2 Adc) (I_C = 30 Adc, I_B = 6 Adc)	$V_{CE(SAT)}$*		1.5 3.0	Vdc
Base - Emitter Voltage* (I_C = 30 Adc, V_{CE} = 5 V)	V_{BE} (on)*		2.5	Vdc
Current - Gain - Bandwith Product (I_C = 1 Adc V_{CE} = 10 Vdc, f = 5 MH_Z)	f_T	10		MH_Z

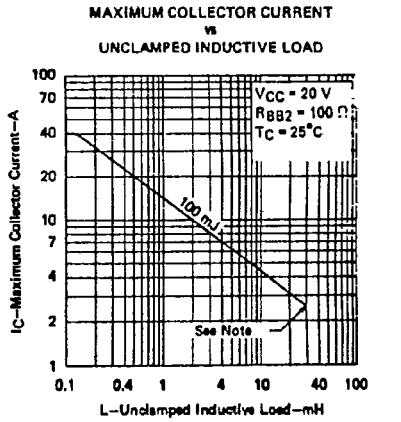
SWITCHING TIMES

Delay Time Rise Time	(V_{CC} = 40 Vdc, V_{EB} (Off) = 3 Vdc. I_C = 20 Adc	t(on)	t_d t_r +	800	ns
Storage Time Fall Time	I_{B1} = I_{B2} = 2 Adc)	t(off)	t_s + t_f	3.0	us

*Pulse Test: Pulse width = 300 us, DutyCycle = 2%

TYPICAL OPERATING CURVES





NOTE: ABOVE THIS POINT THE SAFE OPERATING AREA HAS NOT BEEN DEFINED.

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