

SILICON N-P-N HIGH-SPEED TRANSISTOR

2N3261

Maximum Ratings, Absolute-Maximum Values:

COLLECTOR TO BASE VOLTAGE, V_{CB0}	40 max.	volts
COLLECTOR-TO-EMITTER VOLTAGE, V_{CE0}	15 max.	volts
EMITTER-TO-BASE VOLTAGE, V_{EB0}	6 max.	volts
COLLECTOR CURRENT, I_C	500 max.	ma
TRANSISTOR DISSIPATION, P_T:		
For case temperatures ^a } up to 25° C	1 max.	watt
} above 25° C	derate at 6.7 mW/°C	
For free-air temperatures } up to 25° C	0.3 max.	watt
} above 25° C	derate at 2 mW/°C	

TEMPERATURE RANGE:

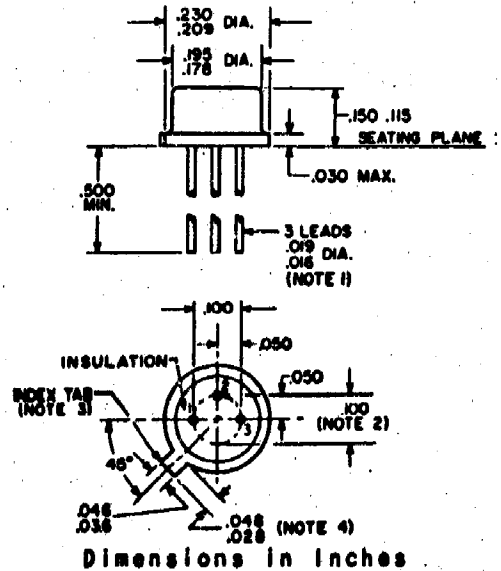
Storage	-65 to +200 °C
Operating	-65 to +175 °C

LEAD TEMPERATURE (During soldering):

At distances $\geq 1/16$ " from seating surface for 10 seconds max.	230 max.	°C
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^aMeasured at center of seating surface.

DIMENSIONAL OUTLINE
JEDEC No. TO-52



Note 1: THE SPECIFIED LEAD DIAMETER APPLIES IN THE ZONE BETWEEN 0.050 INCH AND 0.250 INCH FROM THE SEATING PLANE. BETWEEN 0.250 INCH AND 0.500 INCH OF THE LEAD, A MAXIMUM DIAMETER OF 0.021 INCH IS HELD. OUTSIDE THESE ZONES, THE LEAD DIAMETER IS NOT CONTROLLED.

NOTE 2: LEADS HAVING MAXIMUM DIAMETER (0.019 INCH) MEASURED IN GAUGING PLANE 0.054 INCH + 0.001 INCH - 0.000 INCH BELOW THE SEATING PLANE OF THE DEVICE SHALL BE WITHIN 0.007 INCH OF THEIR TRUE LOCATIONS RELATIVE TO A MAXIMUM-WIDTH TAB.

NOTE 3: INDEX TAB FOR VISUAL ORIENTATION ONLY.

NOTE 4: MEASURED FROM MAXIMUM DIAMETER OF ACTUAL DEVICE.



ELECTRICAL CHARACTERISTICS

Characteristics	Symbols	TEST CONDITIONS								LIMITS			Units
		Free-Air Temperature	Frequency	DC Collector-to-Emitter Voltage	DC Collector-to-Base Voltage	DC Emitter-to-Base Voltage	DC Emitter Current	DC Collector Current	DC Base Current	Type 2N3261			
		T _{FA}	f	V _{CE}	V _{CB}	V _{EB}	I _E	I _C	I _B	Min.	Typ.	Max.	
°C	Mc	volts	volts	volts	ma	ma	ma						
Collector-Cutoff Current	I _{CEV}	25 150		15 15		0 0				- -	5 6.5	25 25	na μa
Base-Cutoff Current	I _{BEV}	25		15		0				-	-5	-25	na
Collector-to-Base Break-down Voltage	BV _{CB0}	25					0	0.01		40	-	-	volts
Collector-to-Emitter Break-down Voltage	BV _{CEO}	25						10	0	15	-	-	volts
Emitter-to-Base Break-down Voltage	BV _{EB0}	25					0.01	0		6	-	-	volts
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	25						100	10	-	0.28	0.35	volts
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	25						100	10	0.8	0.93	1.1	volts
Static Forward Current-Transfer Ratio	h _{FE}	25		1				10		40	60	150	
		25		1				100		30*	50*	-	
		25		1				200		20*	35*	-	
		-55		1				10		20	35	-	
Magnitude of Small-Signal Forward Current-Transfer Ratio	h _{fe}	25	100	1				100		3	4.4	-	
		25	100	10				10		6	8.3	-	