NEW ENGLAND SEMICONDUCTOR

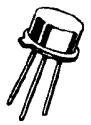
2N3468

JAN,JANTX
JANTXV

SILICON SMALL-SIGNAL PNP TRANSISTORS

- FAST SWITCHING
- HIGH FREQUENCY
- HIGH CURRENT GAIN

PNP SWITCHING TRANSISTOR



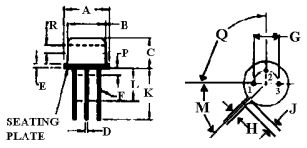
TO-39
TO-205AD

MAXIMUM RATINGS

RATINGS	SYMBOL	2N3468	UNITS
Collector-Emitter Voltage	V_{CEO}	50	Vdc
Collector-Base Voltage	V_{CBO}	50	Vdc
Emitter-Base Voltage	V_{EBO}	5.0	Vdc
Collector Current -- Continuous	I_C	1.0	Adc
Total Power Dissipation @ $T_C = 25^0C$ Derate above 25^0C	P_D	5.0 28.6	W m/W^0C
Operating & Storage Junction Temperature Range	T_J, T_{stg}	-65 to +200	^0C

MECHANICAL OUTLINE

PIN: 1. EMITTER
2. BASE
3. COLLECTOR



	MILLIMETER		INCHES	
DIM	MIN	MAX	MIN	MAX
A	8.99	9.40	0.350	0.370
B	8.00	8.51	0.315	0.336
C	6.10	6.60	0.240	0.260
D	0.406	0.533	0.016	0.021
E	0.229	3.18	0.009	0.125
F	0.406	0.483	0.016	0.018
G	4.83	5.33	0.190	0.210
H	0.711	0.864	0.028	0.034
J	0.737	1.02	0.029	0.040
K	12.70	-	0.600	-
L	6.35	-	0.250	-
M	46^0 NOM		46^0 NOM	
P	-	1.27	-	0.060
Q	90^0 NOM		90^0 NOM	
R	2.54	-	0.108	-

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ELECTRICAL CHARACTERISTICS ($T_C = 25^0C$ unless otherwise noted)

Characteristics	Symbol	Min	Max	Unit
OFF CHARACTERISTICS				
Collector-Emitter Sustaining Voltage I_C = -10 mAdc, I_B = 0	$V_{CEO(sus)}$	50		Vdc
Collector Cutoff Current V_{CE} = -30 Vdc, V_{EB} = -3.0 Vdc	I_{CEX}		100	mAdc
Emitter Cutoff Current V_{CB} = -30 Vdc, I_E = 0 V_{CB} = 30 Vdc, I_E = 0, $T_A = 100^0C$	I_{EBO}		0.10 0.15	µAdc
ON CHARACTERISTICS (1)				
DC Current Gain I_C = -150 mAdc, V_{CE} = -1.0 Vdc I_C = -500 mAdc, V_{CE} = -1.0 Vdc	h_{FE}	25 25	 75	
Collector-Emitter Saturation Voltage I_C = -150 mAdc, I_B = -15 mAdc I_C = -500 mAdc, I_B = -50 mAdc	$V_{CE(sat)}$		0.36 0.6	Vdc
Base-Emitter Saturation Voltage (1) I_C = -150 mAdc, I_B = -15 mAdc	$V_{BE(sat)}$		1.0	Vdc
DYNAMIC CHARACTERISTICS				
Forward Current Transfer Ratio I_C = 50 mAdc, V_{CE} = 10 Vdc, f = 100 MHz	$\|h_{fe}\|$	1.5		
Output Capacitance V_{CB} = -10 Vdc, I_E = 0, f = 100 MHz	C_{ob}		25	p^f

(1)Pulse Test: Pulse Width = 300µs, Duty Cycle ≤ 2.0%.

SX LEVEL RELIABILITY TESTING

100% SCREENING	GROUP A	GROUP B (Sample)	GROUP C (Sample)
Internal Visual	Visual and Mechanical	Solderability	Physical Dimensions
Temp Cycle	DC Static Tests 25°C	Temp Cycle	Thermal Shock
Thermal Response	DC Static Tests High Temp	Fine and Gross Leak	Terminal Strength
Constant	DC Static Tests Low Temp	Bond Strength	Hermetic Seal
Acceleration	Dynamic Tests @ 25°C	Intermittent Op Life	Moisture Resistance
PIND		Steady State Op life	Shock Test
Fine and Gross Leak		Thermal Resistance	Vibration Test
HTRB		Hi-Temp (non operating)	Constant Acceleration
Power Burn In			Salt Atmosphere
			Operation Life

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