New Jersey Semi-Conductor Products, Inc.

20 STERN AVE. SPRINGFIELD, NEW JERSEY 07081 U.S.A. TELEPHONE: (973) 376-2922 (212) 227-6005 FAX: (973) 376-8960

2N243, 2N244

N-P-N GROWN SILICON TRANSISTORS

Oval Welded Package

mechanical data

The transistor is in an oval welded package with glass-to-metal hermetic seal between case and leads. Unit weight is approximately 1 gram. The mounting clip is hardware supplied with the transistor.



*absolute maximum ratings at 25°C case temperature (unless otherwise noted)

Collector-Base Voltage	•	•	•	•		•	•		•	•		•	•	•		-	60 v
Collector Current		•	•	•	•		•			•		•	•	•	•		60 ma
Total Device Dissipation (see note 1) .									•							•	750 mw
Collector Junction Operating Temperature	•	•	•	•				•		•	•		•	•	•	•	+150°C
Storage Temperature Range												•			-55	i ^o to	+150°C

NOTE: 1. Derate linearly to 150°C case temperature at the rate of 6 mw/°C.

Indicates JEDEC registered data.

N J S

NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors

parameter		test co	nditions	types	min*	typ	max*	tinu	
Icio	Collector Cutoff Current	$V_{CH} = 30 v,$	I _E == 0	Ali	T '		1	μα	
Icao	Collector Cutoff Current	$V_{CB} = 30 v,$ $T_{C} = 150^{\circ}C$	i _e = 0	All		15		μα	
BVCIO	Collector-Base Breakdown Voltage	$l_{c} = 50 \ \mu o,$	$I_{E} = 0$	All	60	'		۷	
BYCEO	Collector-Emitter Breakdown Voltage	$l_{c} = 100 \ \mu o$,	l ₁ = 0	All		60		V	
V _{BE}	Base-Emitter Voltage	I ₈ = 3 ma,	l _c = 20 ma	All			1	۷	
fCE(sat)	DC Collector-Emitter Saturation Resistance	l _s == 3 ma,	l _c = 20 ma	All			350	ohm	
hrs	AC Common-Base Forward Current Transfer Ratio	$V_{CB} = 10 v,$ f = 1 kc	1 _E = -5 ma	2N243 2N244	0.9 0.961	0.94 0.97	0.968 0.989	-	
h _{ib}	AC Common-Base Input Impedance	$V_{CB} = 10 v,$ f = 1 kc	l _E = -5 ma	Ali		12	30	ohm	
h _{rb}	AC Common-Base Reverse Voltage Transfer Ratio	$V_{CB} = 10 v,$ f = 1 kc	1 _E = -5 ma	All		60x10-4	300x10-+	_	

electrical characteristics at 25°C case temperature (unless otherwise noted)

functional tests at 25°C case temperature

1	<u> </u>	Company College Barrier College	W 20.	1 - 20 ma	A 19	20		dh
	U De	Common-Emitter rower bain	Į VCB — 20 V	IC 10 III0	AA	30		
	F*	(See Circuit Relow)	$R_{-} = 100 \Omega_{-}$	$\mathbf{R} = 1\mathbf{K}\mathbf{\Omega}$		1		
		(see circuit below)	ng,					
			f == 1 kc,	V _a = 0.2 v				

