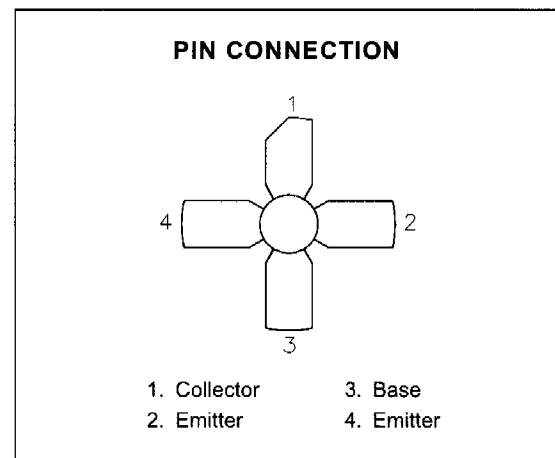
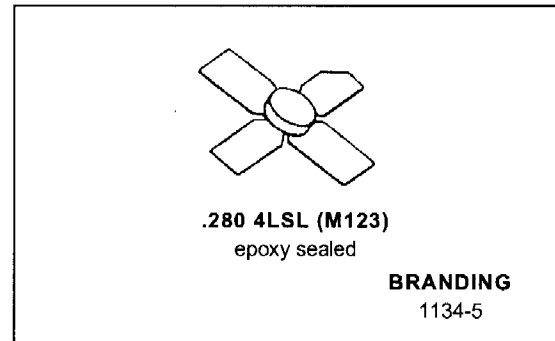


## SD1134-05

### RF & MICROWAVE TRANSISTORS VHF PORTABLE/MOBILE APPLICATIONS

- 175 MHz
- 7.5 VOLTS
- COMMON EMITTER
- P<sub>OUT</sub> = 0.5 W MIN. WITH 7.0 dB GAIN



#### DESCRIPTION

The SD1134-05 is a 7.5 V epitaxial silicon NPN planar transistor designed primarily for VHF communications. It with stands very high VSWR under rated operating conditions.

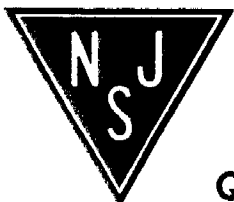
#### ABSOLUTE MAXIMUM RATINGS (T<sub>case</sub> = 25°C)

Symbol	Parameter	Value	Unit
V <sub>CB0</sub>	Collector-Base Voltage	36	V
V <sub>CER</sub>	Collector-Emitter Voltage	16	V
V <sub>CES</sub>	Collector-Emitter Voltage	36	V
V <sub>EBO</sub>	Emitter-Base Voltage	4.0	V
I <sub>C</sub>	Device Current	0.75	A
P <sub>DISS</sub>	Power Dissipation	5.0	W
T <sub>J</sub>	Junction Temperature	+200	°C
T <sub>STG</sub>	Storage Temperature	- 65 to +150	°C

#### THERMAL DATA

R <sub>TH(j-c)</sub>	Junction-Case Thermal Resistance	35	°C/W
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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.



**SD1134-05**

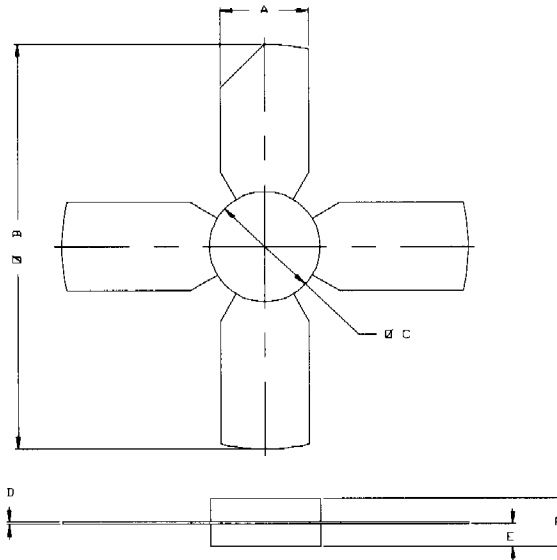
**ELECTRICAL SPECIFICATIONS** ( $T_{case} = 25^{\circ}C$ )

**STATIC**

Symbol	Test Conditions		Value			Unit
			Min.	Typ.	Max.	
$BV_{CES}$	$I_C = 5mA$	$V_{BE} = 0V$	36	—	—	V
$BV_{CEO}$	$I_C = 25mA$	$I_B = 0mA$	16	—	—	V
$BV_{EBO}$	$I_E = 1mA$	$I_C = 0mA$	4.0	—	—	V
$I_{CER}$	$V_{CE} = 10V$	$R_{BE} = 80\Omega$	—	—	0.5	mA
$I_{CBO}$	$V_{CB} = 15V$	$I_E = 0mA$	—	—	1.0	mA
$h_{FE}$	$V_{CE} = 5V$	$I_C = 100mA$	40	—	200	—

**DYNAMIC**

Symbol	Test Conditions		Value			Unit
			Min.	Typ.	Max.	
$P_{OUT}$	$f = 150\text{ MHz}$	$V_{CC} = 7.5\text{ V}$	1.4	—	—	W
$G_P$	$f = 150\text{ MHz}$	$V_{CC} = 7.5\text{ V}$	11.5	—	—	dB
$C_{OB}$	$f = 1\text{ MHz}$	$V_{CB} = 7.5\text{ V}$	—	6.0	—	pF



SGS-THOMSON MICROELECTRONICS		
	MINIMUM Inches/mm	MAXIMUM Inches/mm
A	.220/5.59	.230/5.84
B	-----	1.055/26.8
C	.275/6.99	.285/7.24
D	.004/0.10	.006/0.15
E	.050/1.27	.060/1.52
F	.118/3.00	.130/3.30