

New Jersey Semi-Conductor Products, Inc.

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2N1479
2N1480
2N1481
2N1482

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NPN SILICON TRANSISTOR

JEDEC TO-39 CASE

2N1479 series types are silicon NPN transistors manufactured by the epitaxial planar process, mounted in a hermetically sealed metal case designed for switching and amplifier applications.

MAXIMUM RATINGS ($T_C=25^\circ\text{C}$ unless otherwise noted)

	SYMBOL	2N1479 2N1481	2N1480 2N1482	UNIT
Collector-Base Voltage	V_{CBO}	60	100	V
Collector-Emitter Voltage	V_{CEV}	60	100	V
Collector-Emitter Voltage	V_{CEO}	40	55	V
Emitter-Base Voltage	V_{EB0}	6.0	6.0	V
Collector Current	I_C	1.5	1.5	A
Base Current	I_B	1.0	1.0	A
Power Dissipation	P_D	5.0	5.0	W
Operating and Storage Junction Temperature	T_J, T_{STG}	-65 TO +200		$^\circ\text{C}$
Thermal Resistance	θ_{JC}	35		$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_C=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	2N1479		2N1480		2N1481		2N1482		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
I_{CBO}	$V_{CB}=30\text{V}$		10		10		10		10	μA
I_{CBO}	$V_{CB}=30\text{V}, T_C=150^\circ\text{C}$		500		500		500		500	μA
I_{EBO}	$V_{EB}=6.0\text{V}$		10		10		10		10	μA
BV_{CEV}	$V_{EB}=1.5\text{V}, I_C=0.25\text{mA}$	60		100		60		100		V
BV_{CEO}	$I_C=50\text{mA}$	40		55		40		55		V
$V_{CE(SAT)}$	$I_C=200\text{mA}, I_B=10\text{mA}$		-		-		1.4		1.4	V
$V_{CE(SAT)}$	$I_C=200\text{mA}, I_B=20\text{mA}$		1.4		1.4		-		-	V
$V_{BE(ON)}$	$V_{CE}=4.0\text{V}, I_C=200\text{mA}$		3.0		3.0		3.0		3.0	V
hFE	$V_{CE}=4.0\text{V}, I_C=200\text{mA}$	20	60	20	60	35	100	35	100	
hfe	$V_{CE}=4.0\text{V}, I_C=5.0\text{mA}$		50	TYP	50	TYP	50	TYP	50	TYP
t_{ON}	$I_C=200\text{mA}, I_{B1}=20\text{mA}, I_{B2}=85\text{mA}$		1.2	TYP	1.2	TYP	1.2	TYP	1.2	TYP
t_{OFF}	$I_C=200\text{mA}, I_{B1}=20\text{mA}, I_{B2}=85\text{mA}$		1.6	TYP	1.6	TYP	1.6	TYP	1.6	TYP
C_{ob}	$V_{CB}=40\text{V}$		150	TYP	150	TYP	150	TYP	150	TYP
f_{ab}	$V_{CB}=28\text{V}, I_C=5.0\text{mA}$		1.5	TYP	1.5	TYP	1.5	TYP	1.5	MHz

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