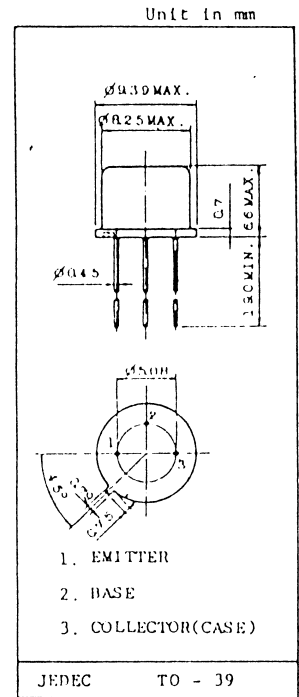


# 2SA503, 2SA504

SILICON PNP EPITAXIAL

MAXIMUM RATINGS (25°C)

Rating	Symbol	Value	Unit
Collector-Base Voltage $V_{CB0}$	2SA503 2SA504	00 -40	V
Collector- Emitter Voltage $V_{CE0}$	2SA503 2SA504	-50 -30	V
Emitter -Base Voltage $V_{EB0}$		-5	V
Collector Current $I_C$		-600	mA
Emitter Current $I_E$		600	mA
Total Device Dissipation $P_C$	$T_a = 25^\circ C$ $T_c = 25^\circ C$	800 6	mW W
Operating Junction and Storage Temperature Range	$T_j$ $T_{str}$	175 -65~175	$^\circ C$



Package Outline

ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ C$  unless otherwise noted)

Characteristic	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-Base Cutoff Current	$I_{CBO}$	$V_{CB} = -30V, I_E = 0$	--	--	-0.5	$\mu A$
Emitter-Base Cutoff Current	$I_{EBO}$	$V_{EB} = -5V, I_C = 0$	--	--	-1	$\mu A$
D.C. Current Gain (Note 1)	$h_{FE}$	$V_{CE} = -2V, I_C = -150mA$	30	--	300	
Collector Saturation Voltage $V_{CE(sat)}$		$I_C = -150mA, I_B = -15mA$	--	-0.2	-0.5	V
Base Saturation Voltage $V_{BE(sat)}$		$I_C = -150mA, I_B = -15mA$	--	-0.8	-1.5	V
Gain-Bandwidth Product	$f_T$	$V_{CE} = -10V, I_E = 10mA$	50	130	--	MHz
Output Capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1MHz$	--	18	30	pF
Base Resistance	$r_{bb'}$	$V_{CE} = -6V, I_E = 1mA, f = 30MHz$	--	10	30	$\Omega$
Switching Speeds	Turn-on Time	Note 2.	--	25	--	ns
	Storage Time		--	500	--	ns
	Fall Time		--	80	--	ns

(Note 1) According to the value of  $h_{FE}$ , the 2SA503 and 2SA504 are classified as follows.

項目	色ドット	直流電流増幅率 $h_{FE}$	
		最小	最大
2SA503—O	橙	30	90
2SA503—Y	黄	50	150
2SA503—GR	緑	100	300

Note 2. Switching Speed Circuit

