

2SB544,2SD400 - SILICON EPITAXIAL PLANAR TRANSISTOR FOR DRIVER,
ELECTRIC-GOVERNOR AND POWER-AMPLIFIER

ABSOLUTE MAXIMUM RATINGS/Ta=25°C		2SB544	2SD400	
Collector to Base Voltage	V_{CBO}	-25	25	V
Collector to Emitter Voltage	V_{CEO}	-25	25	V
Emitter to Base Voltage	V_{EBO}	-5	5	V
Collector Current	I_C	-1	1	A
	i_{cp}	-2	2	A
Collector Dissipation	P_C	750		mW
Junction Temperature	T_j	125		°C
Storage Temperature	T_{stg}	-40 - +125		°C

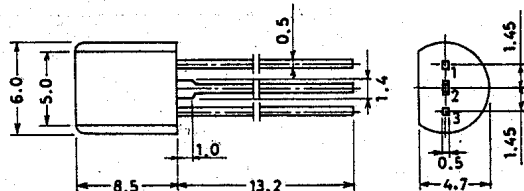
ELECTRICAL CHARACTERISTICS/Ta=25°C, 2SB544 (parenthesis: 2SD400)

		2SB544			2SD400		
		min	typ	max	min	typ	max
I_{CBO}	$V_{CB} = -20(20)V$			-1.0			1.0 μA
I_{EBO}	$V_{EB} = -4(4)V$			-1.0			1.0 μA
$h_{FE}(1)$	$V_{CE} = -2(2)V, I_C = -50(50)mA$	60		320	60		320
$h_{FE}(2)$	$V_{CE} = -2(2)V, I_C = -1(1)A$ pulse	30			30		
f_T	$V_{CE} = -10(10)V, I_C = -50(50)mA$		180			180	MHz
C_{ob}	$V_{CB} = -10(10)V, f = 1MHz$		25			15	pF
$V_{CE}(sat)$	$I_C = -500(500)mA, I_B = -50(50)mA$		-0.3	-0.7		0.1	0.3 V
$V_{BE}(sat)$	$I_C = -500(500)mA, I_B = -50(50)mA$		-0.85	-1.2		0.85	1.2 V
$V_{(BR)CBO}$	$I_C = -10(10)\mu A$	-25			25		V
$V_{(BR)CEO}$	$I_C = -1(1)mA$	-25			25		V
$V_{(BR)EBO}$	$I_E = -10(10)\mu A$	-5			5		V

* h_{FE} rank(2V, 50mA)

60	D	120	100	E	200	160	F	320
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CASE OUTLINE(unit: mm)



1. Base
2. Collector
3. Emitter