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

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

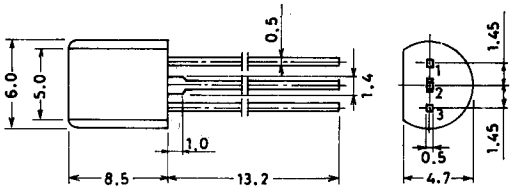
ELECTRICAL CHARACTERISTICS/Ta=25°C,2SB544(parenthesis:2SD400)

		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)μA	-25			25			V
$V_{(BR)CEO}$	I_C=-1(1)mA	-25			25			V
$V_{(BR)EBO}$	I_E=-10(10)μA	-5			5			V

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

60	D	120	100	E	200	160	F	320

CASE OUTLINE(unit: mm)



1. Base
2. Collector
3. Emitter