



《风光欣》技术资料

2SA1020

PNP EPITAXIAL SILICON TRANSISTOR

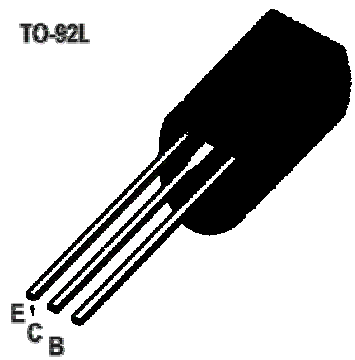
POWER AMPLIFIER APPLICATIONS

POWER SWITCHING APPLICATIONS

- Low Collector Saturation Voltage
: $V_{CE(sat)} = -0.5V$ (Max.) ($I_C = -1A$)
- High Speed Switching Time : $t_{stg} = 1.0\mu s$ (Typ.)
- Complementary to 2SC2655.

ABSOLUTE MAXIMUM RATINGS(TA=25)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	-50	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EB0}	-5	V
Collector Current	I_C	-2	A
Collector Power Dissipation	P_C	900	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C



ELECTRICAL CHARACTERISTICS(TA=25)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CB0}	$V_{CB} = -50V, I_E = 0$	—	—	-1.0	μA
Emitter Cut-off Current	I_{EB0}	$V_{EB} = -5V, I_C = 0$	—	—	-1.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$	-50	—	—	V
DC Current Gain	$h_{FE(1)}$	$V_{CE} = -2V, I_C = -0.5A$	70	—	240	
	$h_{FE(2)}$	$V_{CE} = -2V, I_C = -1.5A$	40	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -1A, I_B = -0.05A$	—	—	-0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -1A, I_B = -0.05A$	—	—	-1.2	V
Transition Frequency	f_T	$V_{CE} = -2V, I_C = -0.5A$	—	100	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$	—	40	—	pF
Switching Time	Turn-on Time	t_{on}				μs
	Storage Time	t_{stg}	—	0.1	—	
	Fall Time	t_f	—	1.0	—	
			—	0.1	—	

Hfe CLASSIFICATION

Classification	O	Y
$H_{FE(1)}$	70-140	120-240