
2SD1676

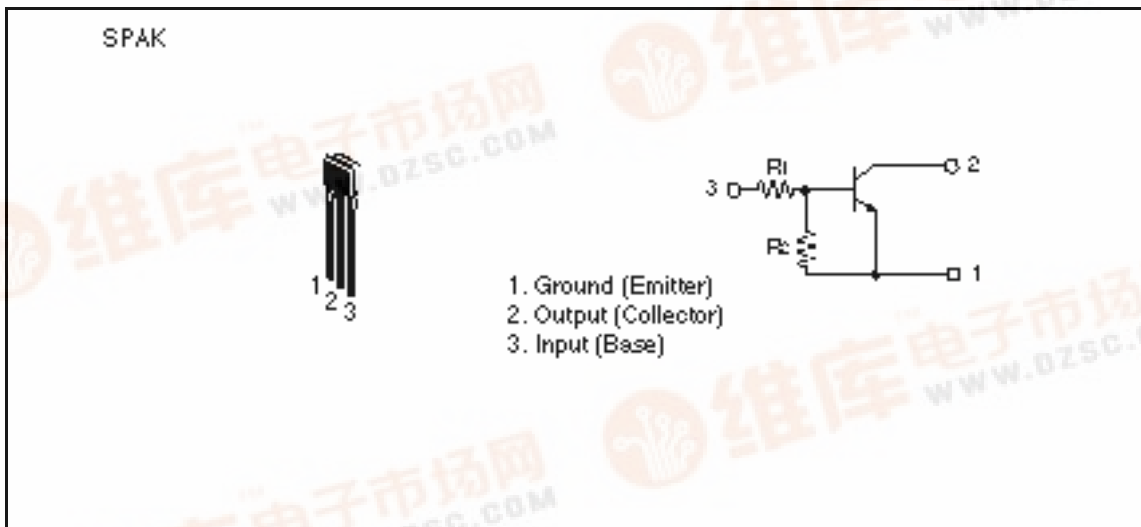
Silicon NPN with Internal Resistance

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Application

Low frequency amplifier, Muting, Switching, Inverter

Outline



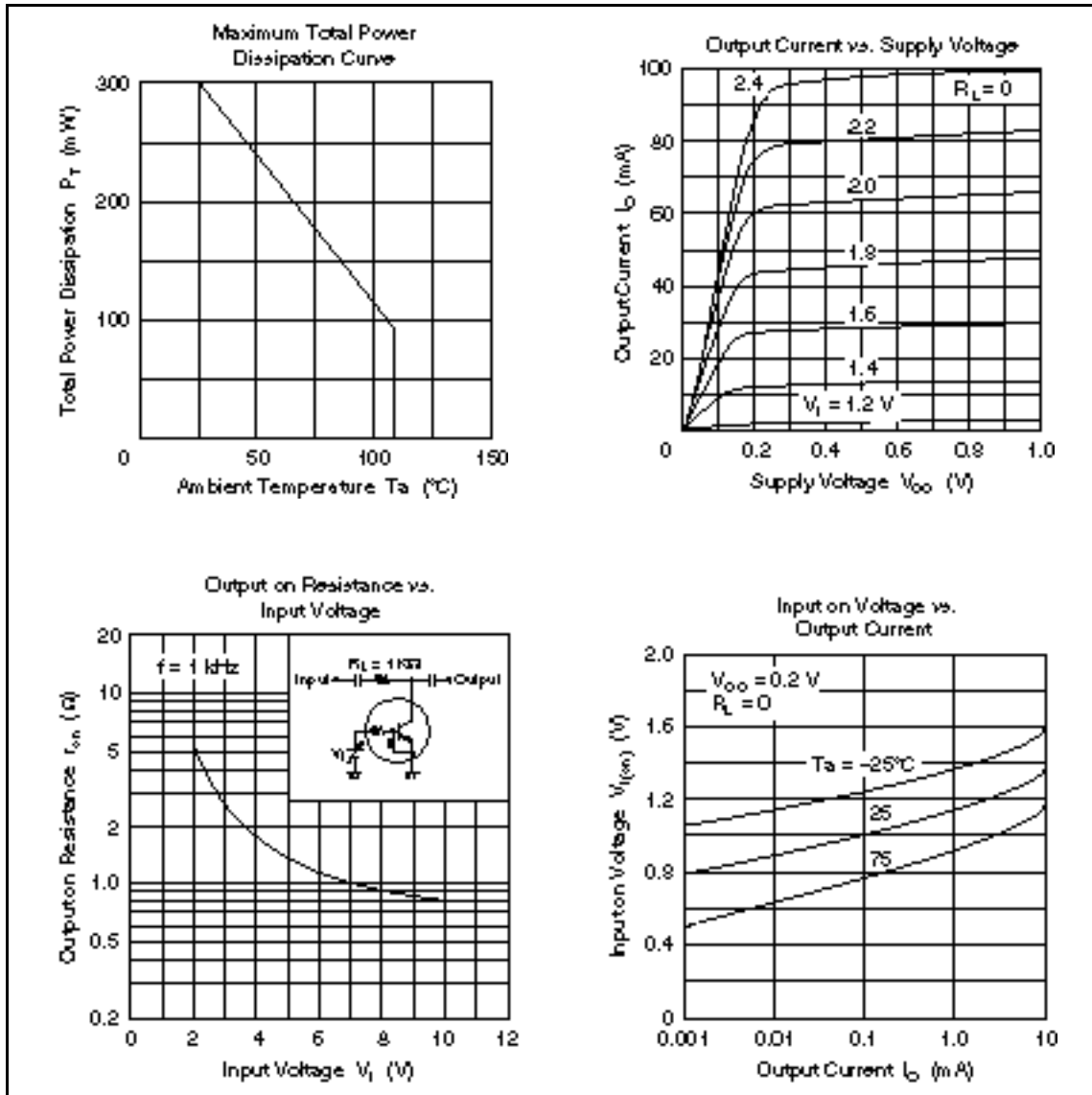
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Absolute Maximum Ratings (Ta = 25°C)

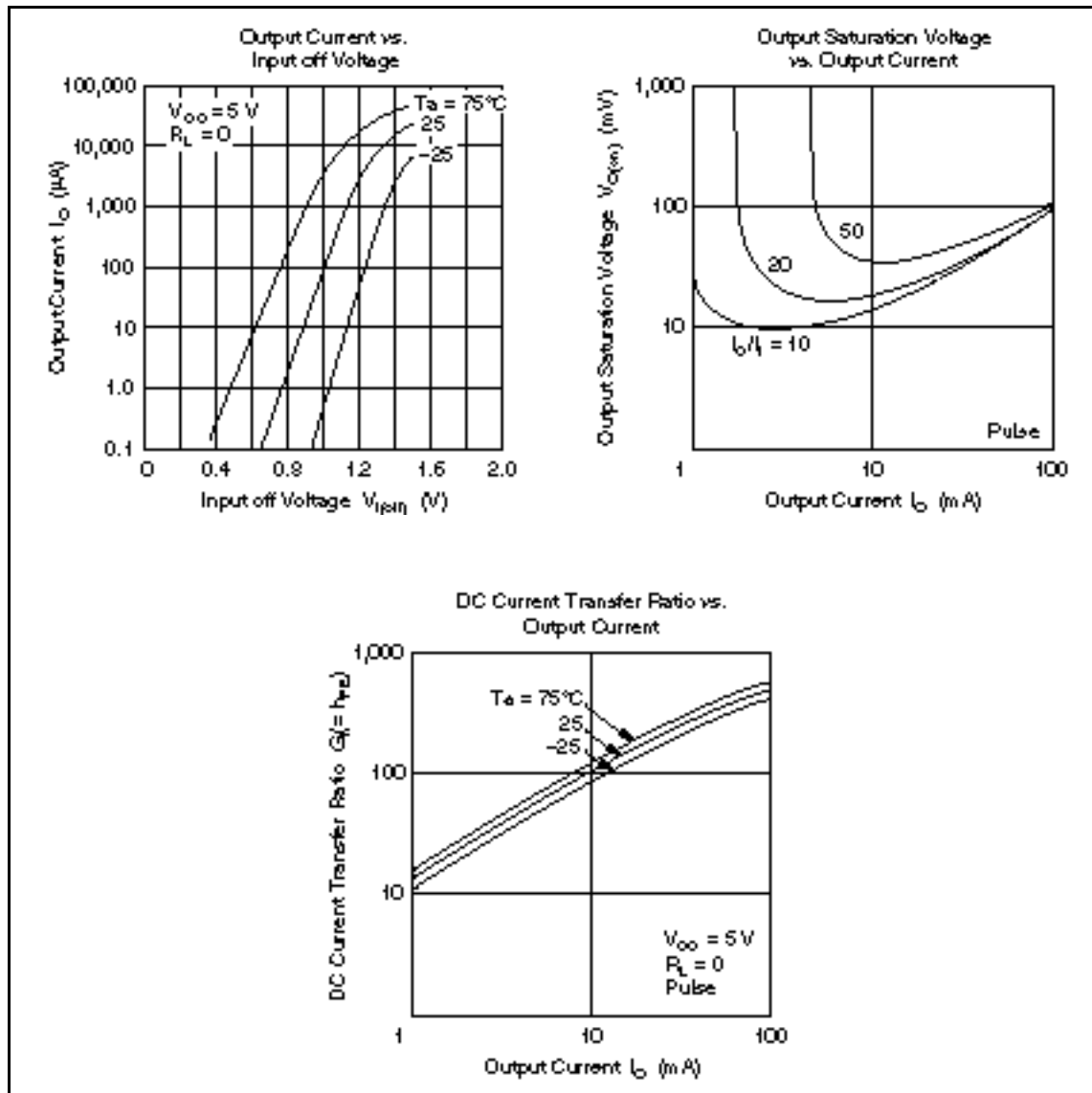
Item	Symbol	Ratings	Unit
Supply voltage	V _{CC}	20	V
Input voltage	V _I	±10	V
Output current	I _O	600	mA
Total power dissipation	P _T	300	mW
Operating temperature	T _{OP}	-25 to +110	°C
Storage temperature	T _{stg}	-55 to +150	°C

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Input on voltage	V _{I(on)}	1.1	—	1.7	V	V _{CC} = 0.2 V, I _O = 10 mA
Input off voltage	V _{I(off)}	0.5	—	1.2	V	V _{CC} = 5 V, I _O = 10 μA
Output saturation voltage	V _{O(on)}	—	20	40	mV	I _O = 10 mA, I _I = 0.5 mA
Output cutoff current	I _{O(off)}	—	—	0.5	μA	V _{CC} = 5 V, V _I = 0
DC current transfer ratio	G _i	60	100	—		V _{CC} = 5 V, I _O = 10 mA
Input resistance	R ₁	—	6.8	—	k	
Resistance ratio	R ₁ /R ₂	0.9	1.0	1.1		
Turn on time	t _{on}	—	0.3	—	μS	V _{CC} = 5 V, V _I = 5 V, R _L = 1k
Storage time	t _{stg}	—	1.5	—	μS	
Fall time	t _f	—	0.7	—	μS	
Output on resistance	r _{on}	—	1.0	—		V _I = 7 V, R _L = 1k, f = 1kHz



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HITACHI

Hitachi, Ltd.

Semiconductor & IC Div.

Nippon Bldg., 2-6-2, Ohite-machi, Chiyoda-ku, Tokyo 100, Japan

Tel Tokyo (03) 3270-2111

Fax (03) 3270-5109

For further information write to:

Hitachi America, Ltd.
Semiconductor & IC Div.

2000 Sierra Point Parkway

Brabens, CA 94005-4835

U.S.A.

Tel 415-589-8300

Fax 415-589-4207

Hitachi Europe GmbH
Electronic Components Group

Continental Europe

Dornacher Straße 3

D-85522 Feldkirchen

München

Tel 089-9 24 80-0

Fax 089-9 29 30 00

Hitachi Europe Ltd.

Electronic Components Div.

Northern Europe Headquarters

Willisbrook Park

Lower Cookham Road

Uxbridge

Berkshire SL6 6YU

United Kingdom

Tel 0628-585000

Fax 0628-778322

Hitachi Asia Pte. Ltd.

45 Collyer Quay #20-00

Hitachi Tower

Singapore 0104

Tel 535-2100

Fax 535-1533

Hitachi Asia (Hong Kong) Ltd.

Unit 705, North Tower,

World Finance Centre

Harbour City, Canton Road

Tsim Sha Tsui, Kowloon

Hong Kong

Tel 27389218

Fax 27308074