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# 2SJ486

Silicon P Channel MOS FET  
Low Frequency Power Switching

# HITACHI

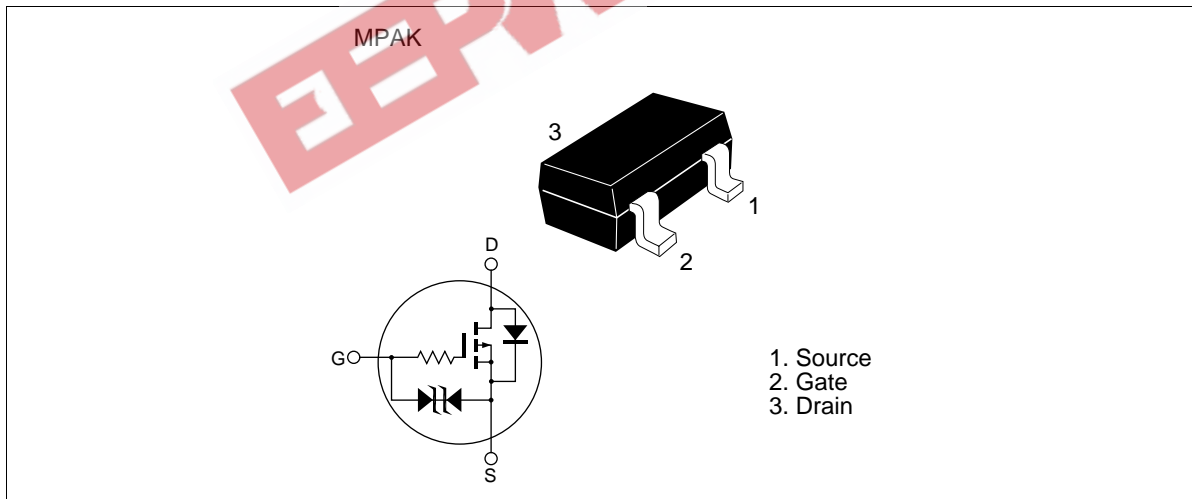
ADE-208-512 A  
2nd. Edition

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## Features

- Low on-resistance  
 $R_{DS(on)} = 0.5 \Omega$  typ. (at  $V_{GS} = -4V$ ,  $I_D = -100$  mA)
- 2.5V gate drive devices.
- Small package (MPAK).

## Outline



## 2SJ486

### Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Ratings	Unit
Drain to source voltage	$V_{DSS}$	-30	V
Gate to source voltage	$V_{GSS}$	±10	V
Drain current	$I_D$	-0.3	A
Drain peak current	$I_{D(pulse)}^{*1}$	-0.6	A
Channel dissipation	Pch	150	mW
Channel temperature	Tch	150	°C
Storage temperature	Tstg	-55 to +150	°C

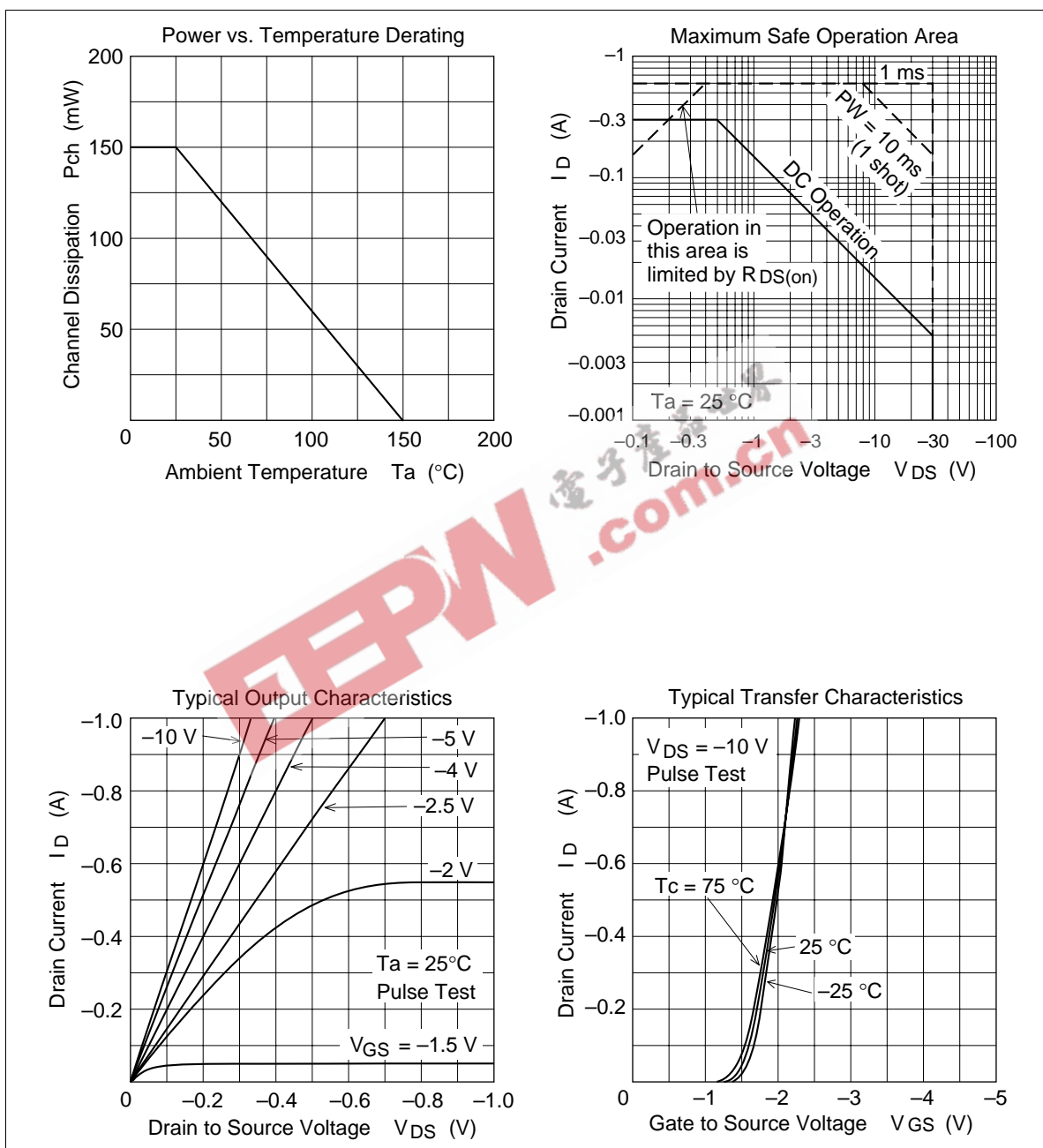
Note: 1.  $PW \leq 10\mu s$ , duty cycle  $\leq 1\%$

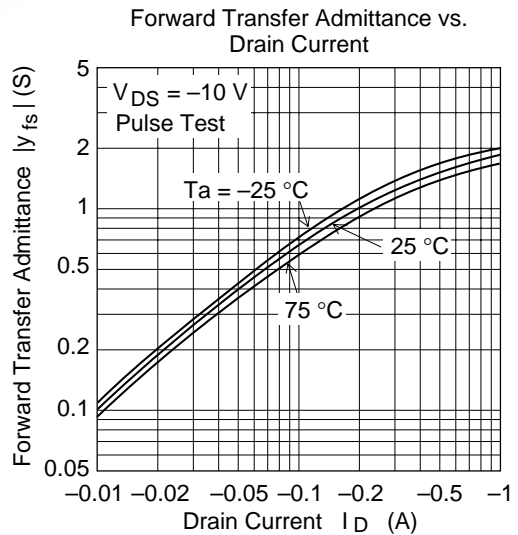
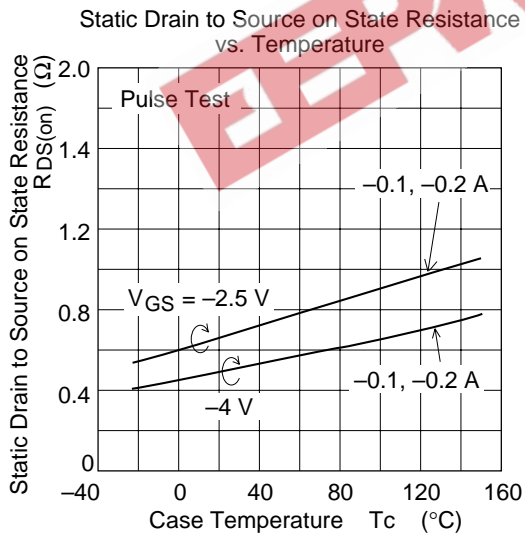
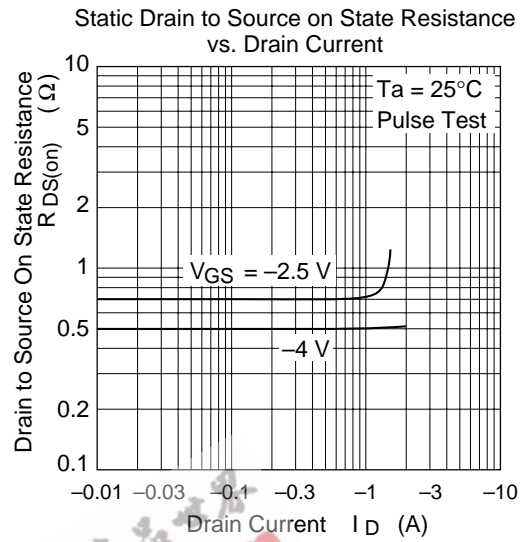
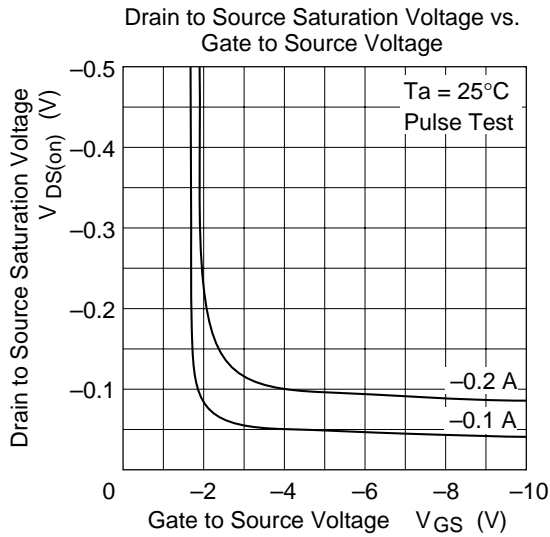
### Electrical Characteristics (Ta = 25°C)

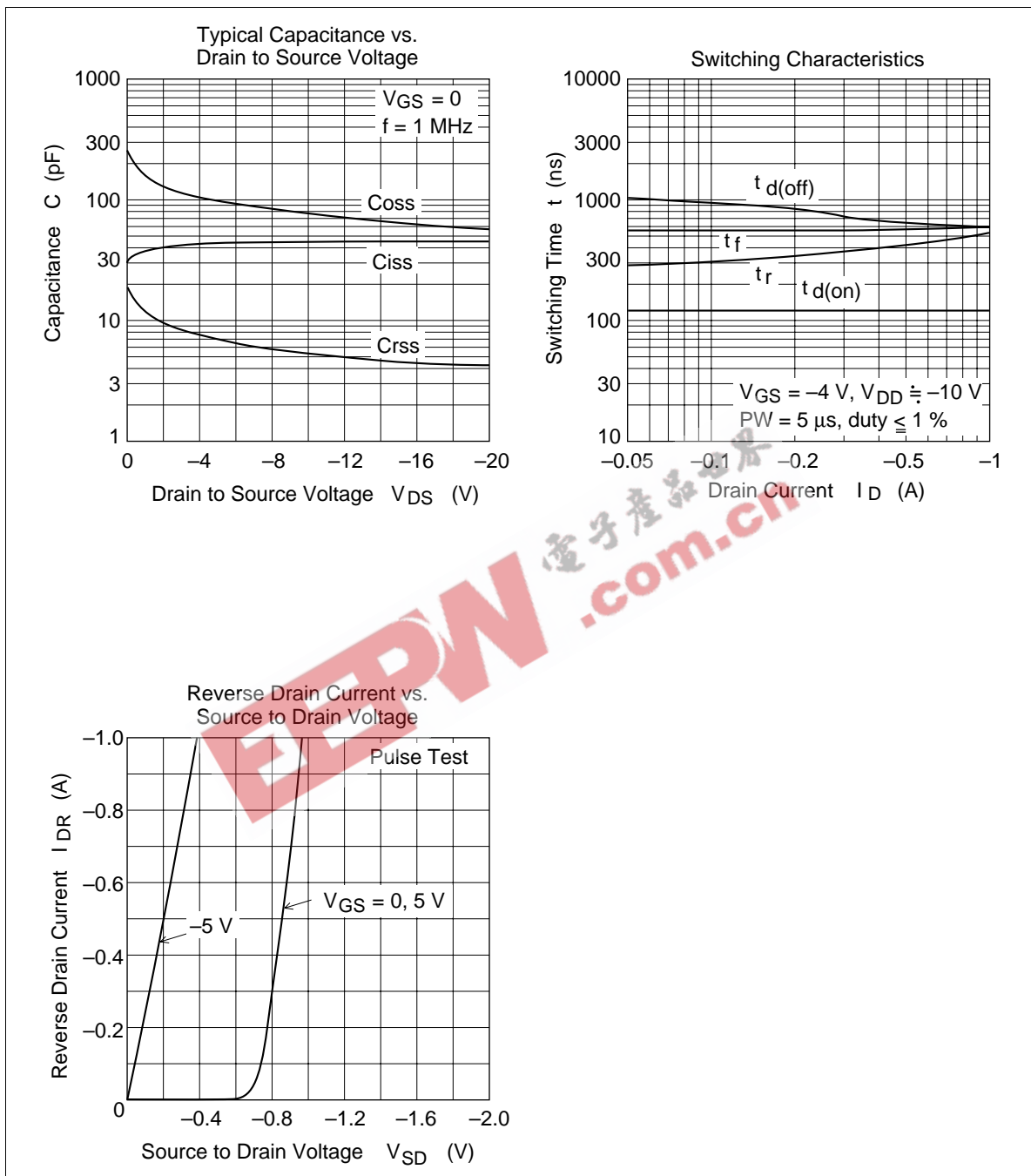
Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Drain to source breakdown voltage	$V_{(BR)DSS}$	-30	—	—	V	$I_D = -10\mu A$ , $V_{GS} = 0$
Gate to source breakdown voltage	$V_{(BR)GSS}$	±10	—	—	V	$I_G = \pm 100\mu A$ , $V_{DS} = 0$
Zero gate voltage drain current	$I_{DSS}$	—	—	-1.0	$\mu A$	$V_{DS} = -30 V$ , $V_{GS} = 0$
Gate to source leak current	$I_{GSS}$	—	—	±5.0	$\mu A$	$V_{GS} = \pm 6.5 V$ , $V_{DS} = 0$
Gate to source cutoff voltage	$V_{GS(off)}$	-0.5	—	-1.5	V	$I_D = -10\mu A$ , $V_{DS} = -5 V$
Static drain to source on state resistance	$R_{DS(on)}$	—	0.5	0.65	$\Omega$	$I_D = -100 mA$ $V_{GS} = -4 V^{*1}$
	$R_{DS(on)}$	—	0.7	1.2	$\Omega$	$I_D = -40 mA$ $V_{GS} = -2.5 V^{*1}$
Forward transfer admittance	$ y_{fs} $	0.4	0.65	—	S	$I_D = -100 mA$ $V_{DS} = -10 V^{*1}$
Input capacitance	$C_{iss}$	—	45	—	pF	$V_{DS} = -10 V$
Output capacitance	$C_{oss}$	—	76	—	pF	$V_{GS} = 0$
Reverse transfer capacitance	$C_{rss}$	—	5.4	—	pF	$f = 1 MHz$
Turn-on delay time	$t_{d(on)}$	—	120	—	ns	$V_{GS} = -4 V$
Rise time	$t_r$	—	340	—	ns	$I_D = -150 mA$
Turn-off delay time	$t_{d(off)}$	—	850	—	ns	$R_L = 66.6 \Omega$
Fall time	$t_f$	—	550	—	ns	

Notes: 1. Pulse test  
2. Marking is "ZU-".

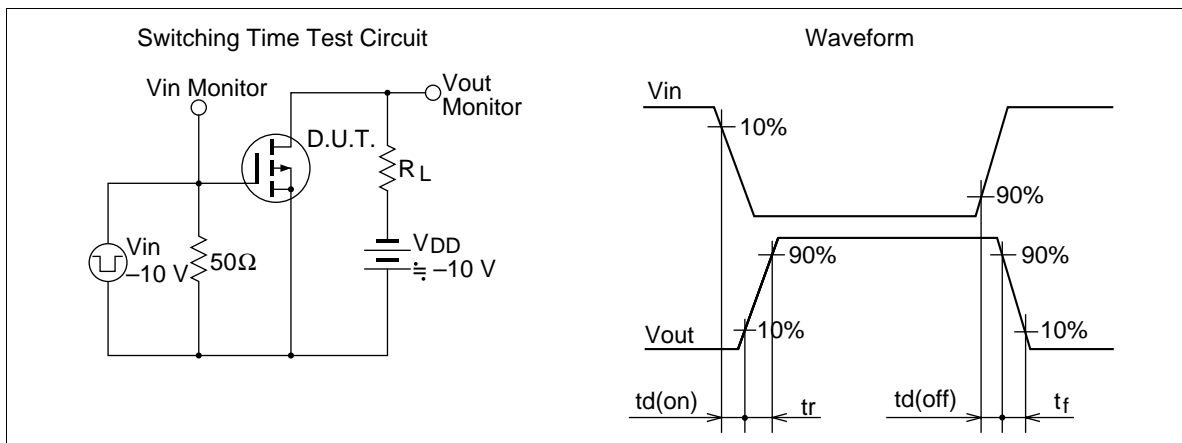
Main Characteristics







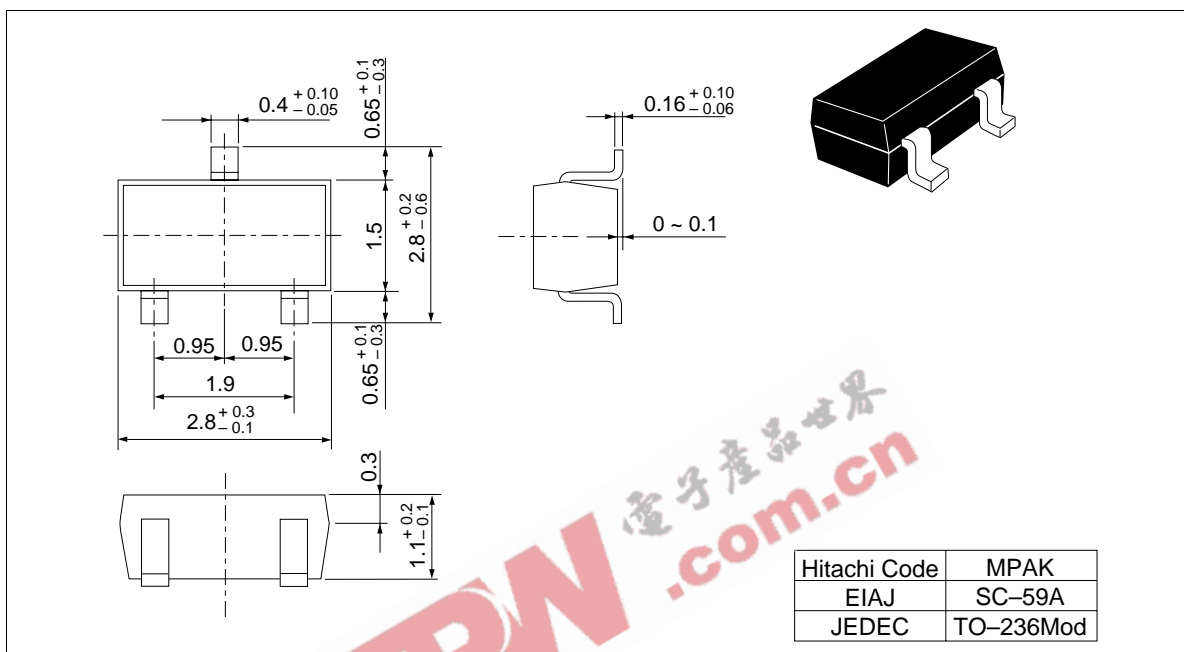
## 2SJ486



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Package Dimensions

Unit: mm



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# HITACHI

## Hitachi, Ltd.

Semiconductor & Integrated Circuits.  
Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan  
Tel: Tokyo (03) 3270-2111 Fax: (03) 3270-5109

URL      North America      : <http://semiconductor.hitachi.com/>  
             Europe                : <http://www.hitachi-eu.com/hel/ecg>  
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### For further information write to:

Hitachi Semiconductor  
(America) Inc.  
179 East Tasman Drive,  
San Jose, CA 95134  
Tel: <1> (408) 433-1990  
Fax: <1> (408) 433-0223

Hitachi Europe GmbH  
Electronic components Group  
Dornacher StraÙe 3  
D-85622 Feldkirchen, Munich  
Germany  
Tel: <49> (89) 9 9180-0  
Fax: <49> (89) 9 29 30 00

Hitachi Europe Ltd.  
Electronic Components Group.  
Whitebrook Park  
Lower Cookham Road  
Maidenhead  
Berkshire SL6 8YA, United Kingdom  
Tel: <44> (1628) 585000  
Fax: <44> (1628) 778322

Hitachi Asia Pte. Ltd.  
16 Collyer Quay #20-00  
Hitachi Tower  
Singapore 049318  
Tel: 535-2100  
Fax: 535-1533

Hitachi Asia Ltd.  
Taipei Branch Office  
3F, Hung Kuo Building, No.167,  
Tun-Hwa North Road, Taipei (105)  
Tel: <886> (2) 2718-3666  
Fax: <886> (2) 2718-8180

Hitachi Asia (Hong Kong) Ltd.  
Group III (Electronic Components)  
7/F., North Tower, World Finance Centre,  
Harbour City, Canton Road, Tsim Sha Tsui,  
Kowloon, Hong Kong  
Tel: <852> (2) 735 9218  
Fax: <852> (2) 730 0281  
Telex: 40815 HITEC HX

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