



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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SCH1335

P-Channel Power MOSFET -12V, -2.5A, 112mΩ, Single SCH6

ON Semiconductor®

<http://onsemi.com>

Features

- 1.8V drive
- Halogen free compliance

Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V _{DSS}		-12	V
Gate-to-Source Voltage	V _{GSS}		±10	V
Drain Current (DC)	I _D		-2.5	A
Drain Current (Pulse)	I _{DP}	PW≤10μs, duty cycle≤1%	-10	A
Allowable Power Dissipation	P _D	When mounted on ceramic substrate (900mm ² ×0.8mm)	0.8	W
Channel Temperature	T _{ch}		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

This product is designed to "ESD immunity < 200V**", so please take care when handling.

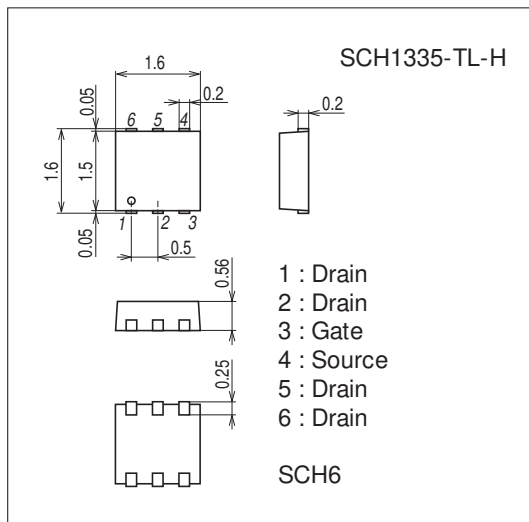
* Machine Model

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

Package Dimensions

unit : mm (typ)

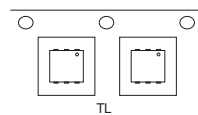
7028-002



Product & Package Information

- Package : SCH6
- JEITA, JEDEC : SOT-563
- Minimum Packing Quantity : 5,000 pcs./reel

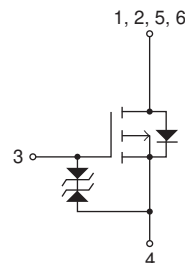
Packing Type : TL



Marking



Electrical Connection

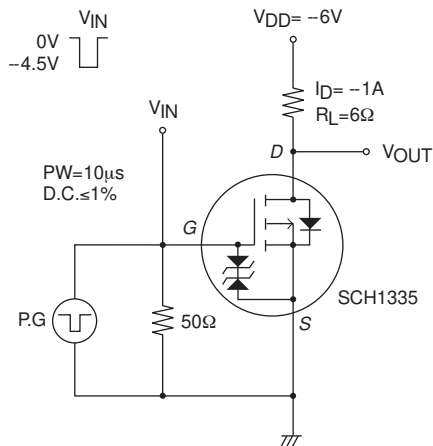


SCH1335

Electrical Characteristics at Ta=25°C

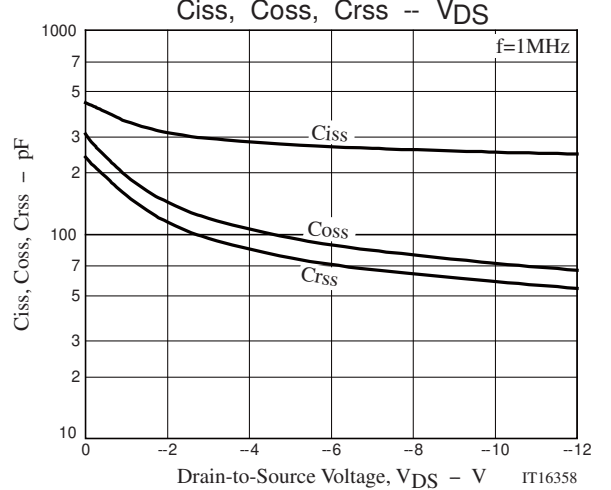
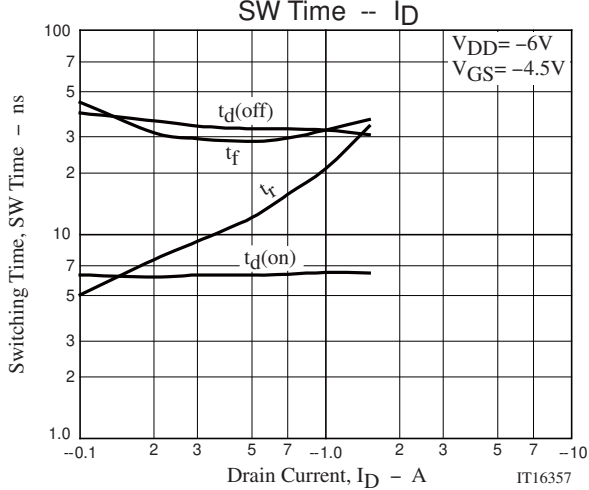
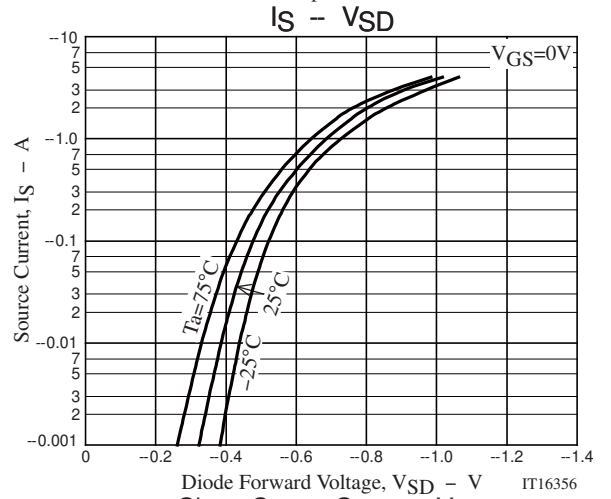
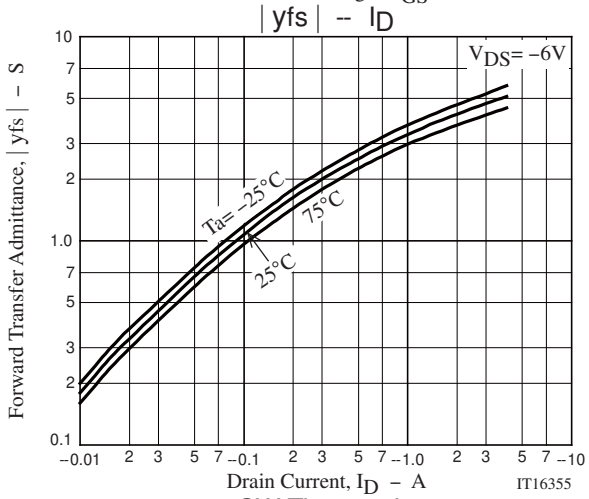
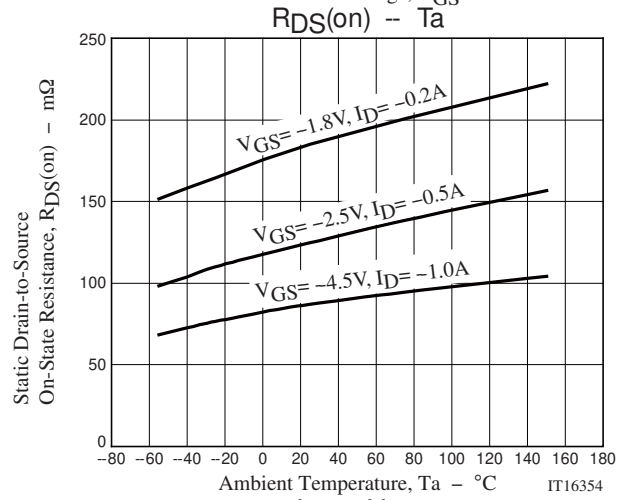
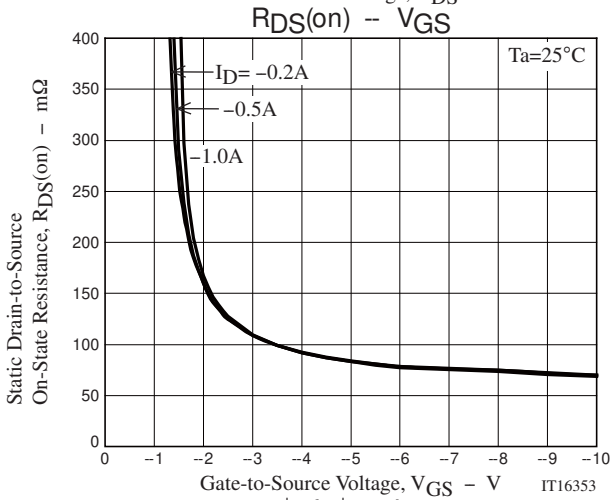
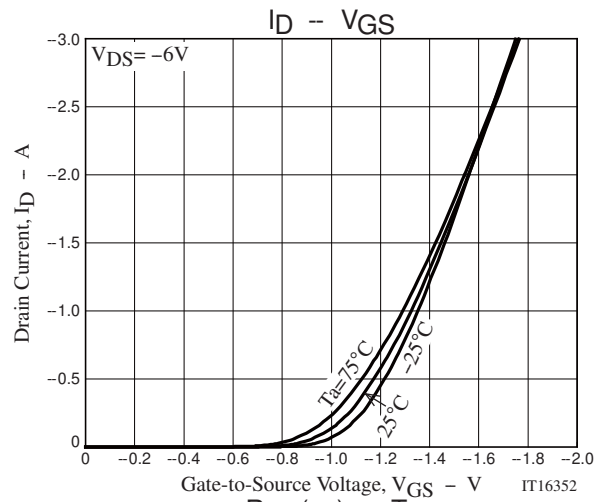
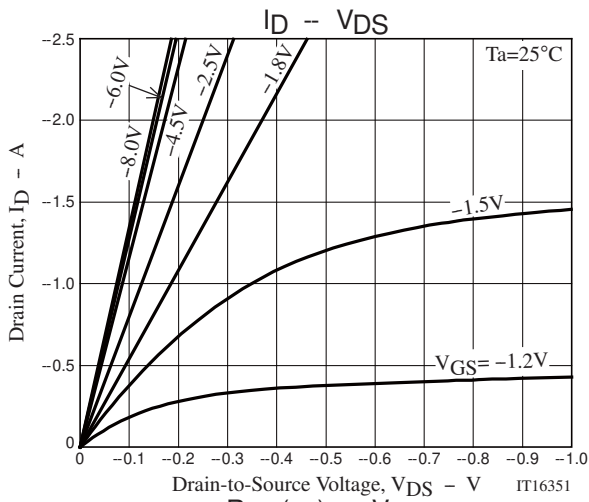
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	V(BR)DSS	I _D =-1mA, V _{GS} =0V	-12			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} =-12V, V _{GS} =0V			-10	μA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} =±8V, V _{DS} =0V			±10	μA
Cutoff Voltage	V _{GS(off)}	V _{DS} =-6V, I _D =-1mA	-0.4		-1.3	V
Forward Transfer Admittance	y _{fs}	V _{DS} =-6V, I _D =-1A		3.3		S
Static Drain-to-Source On-State Resistance	R _{DS(on)1}	I _D =-1A, V _{GS} =-4.5V		86	112	mΩ
	R _{DS(on)2}	I _D =-0.5A, V _{GS} =-2.5V		125	175	mΩ
	R _{DS(on)3}	I _D =-0.2A, V _{GS} =-1.8V		185	285	mΩ
Input Capacitance	C _{iss}	V _{DS} =-6V, f=1MHz		270		pF
Output Capacitance	C _{oss}			90		pF
Reverse Transfer Capacitance	C _{rss}			72		pF
Turn-ON Delay Time	t _{d(on)}		See specified Test Circuit.		6.5	
Rise Time	t _r			21		ns
Turn-OFF Delay Time	t _{d(off)}			33		ns
Fall Time	t _f			33		ns
Total Gate Charge	Q _g	V _{DS} =-6V, V _{GS} =-4.5V, I _D =-2.5A			3.1	
Gate-to-Source Charge	Q _{gs}			0.7		nC
Gate-to-Drain "Miller" Charge	Q _{gd}			0.9		nC
Diode Forward Voltage	V _{SD}	I _S =-2.5A, V _{GS} =0V		-0.84	-1.2	V

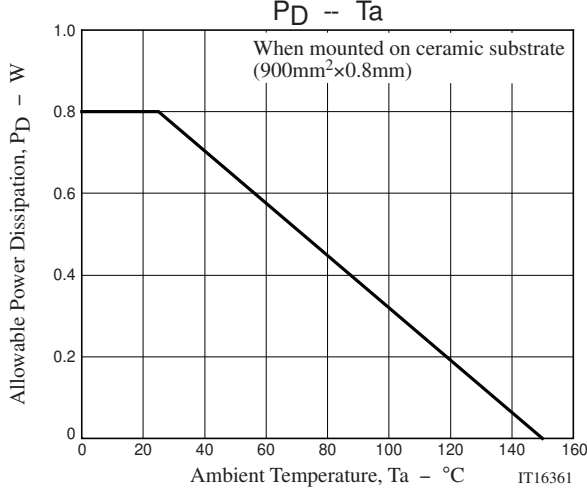
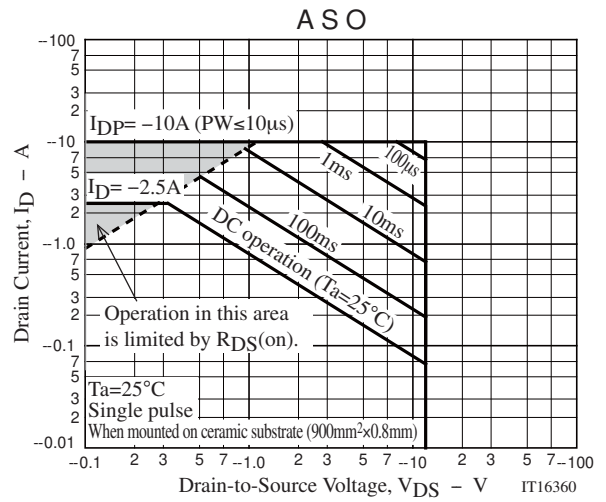
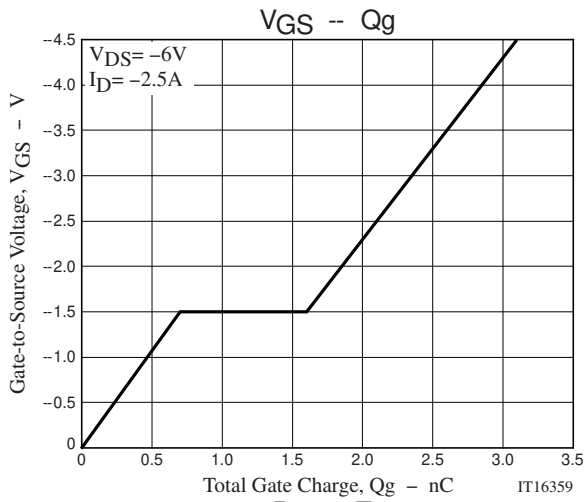
Switching Time Test Circuit



Ordering Information

Device	Package	Shipping	memo
SCH1335-TL-H	SCH6	5,000pcs./reel	Pb Free and Halogen Free





Taping Specification

SCH1335-TL-H

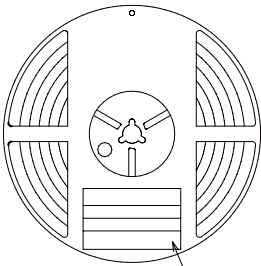
1. Packing Format

Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
SCH6	SCH6	5,000	25,000	150,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

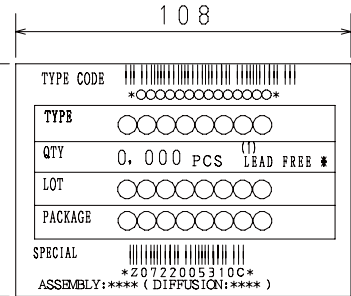
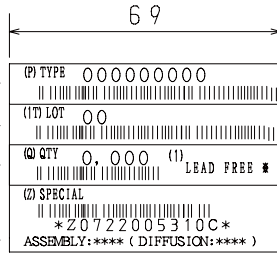
Packing method

Reel label, Inner box label
(unit : mm)

Outer box label
It is a label at the time of factory shipments.
The form of a label may change in physical distribution process.



Type No. →
LOT No. →
Quantity →
Origin →



Reel label

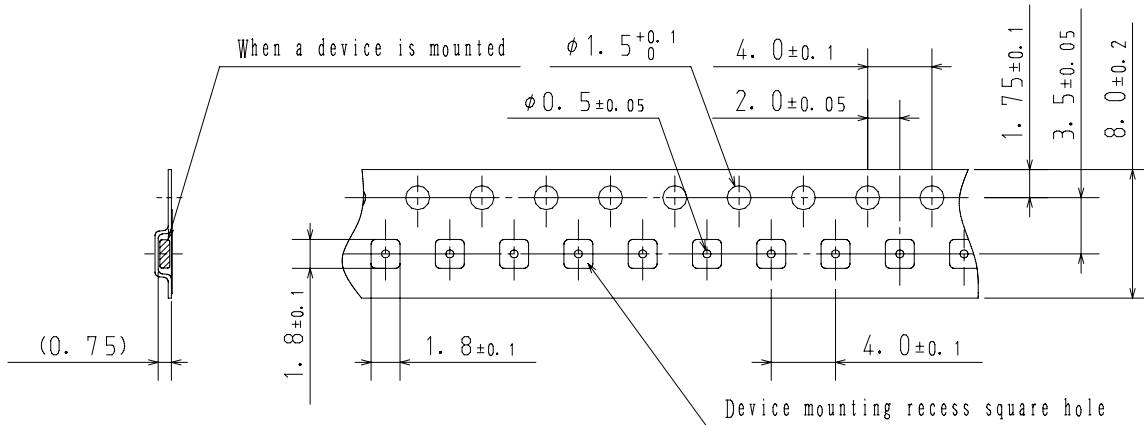
NOTE (1)

The LEAD FREE * description shows that the surface treatment of the terminal is lead free.

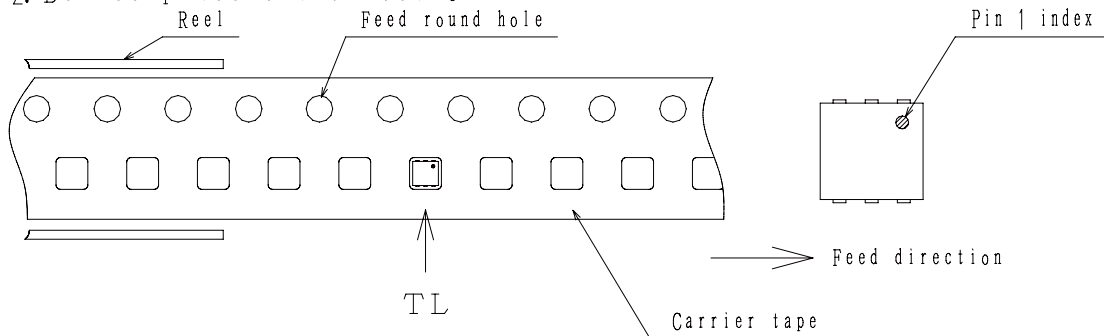
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

2-1. Carrier tape size (unit:mm)



2-2. Device placement direction

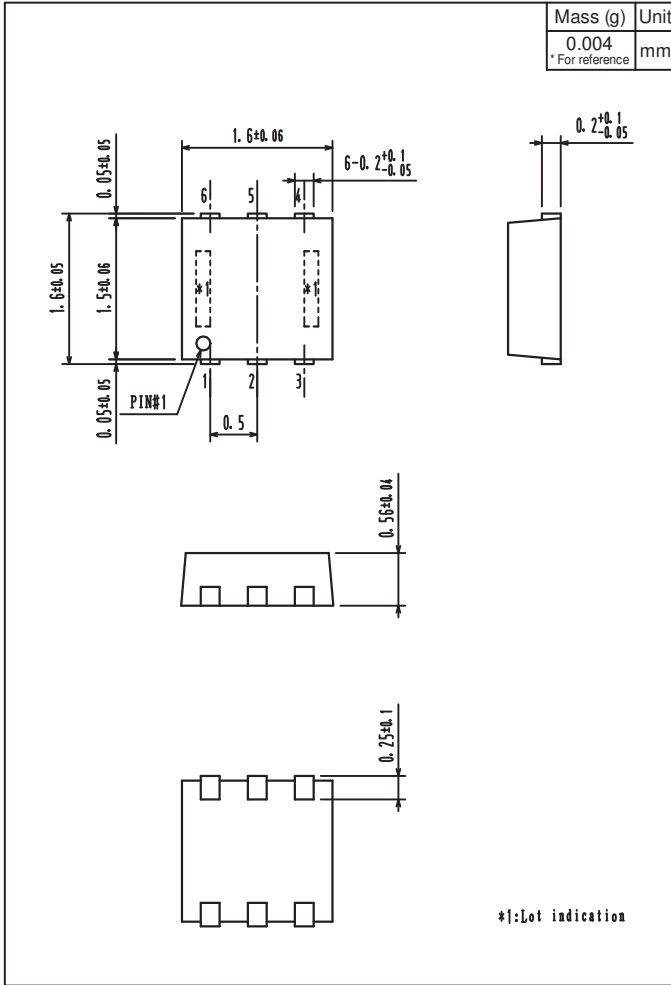


Those with pin 1 index on the feed hole side.....TL

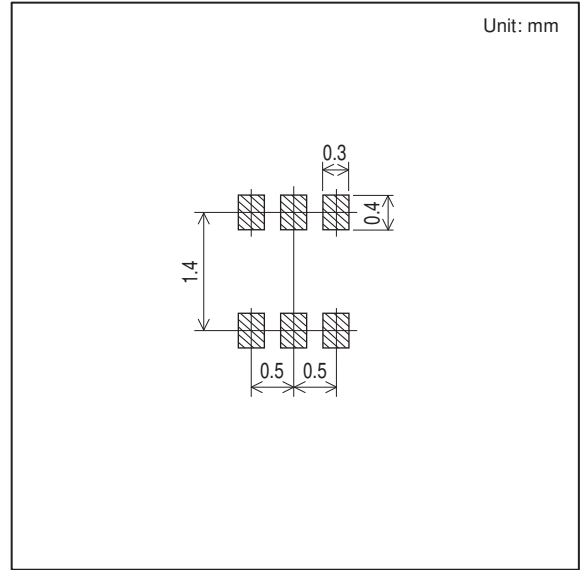
SCH1335

Outline Drawing

SCH1335-TL-H



Land Pattern Example



Note on usage : Since the SCH1335 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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