



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!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

N-Channel Junction Silicon FET

EC3A04B — Low-Frequency General-Purpose Amplifier, Impedance Converter Applications

Applications

- Low-frequency general-purpose amplifier, impedance conversion, infrared sensor applications.

Features

- Small I_{GSS} .
- Small C_{iss} .
- Ultraminiature package facilitates miniaturization in end products.
- Halogen free compliance (UL94HB).

Specifications

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DSX}		30	V
Gate-to-Drain Voltage	V_{GDS}		-30	V
Gate Current	I_G		10	mA
Drain Current	I_D		10	mA
Allowable Power Dissipation	P_D		100	mW
Junction Temperature	T_j		150	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	$V_{(BR)GDS}$	$I_G=-10\mu\text{A}, V_{DS}=0\text{V}$	-30			V
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS}=-20\text{V}, V_{DS}=0\text{V}$			-1.0	nA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS}=10\text{V}, I_D=1\mu\text{A}$	-0.18	-0.65	-2.2	V

Marking : KC

Continued on next page.

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SANYO Semiconductor Co., Ltd.

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EC3A04B

Continued from preceding page.

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain Current	I_{DSS}	$V_{DS}=10V, V_{GS}=0V$	0.6*		3.0*	mA
Forward Transfer Admittance	$ y_{fs} $	$V_{DS}=10V, V_{GS}=0V, f=1kHz$	3.0	5.0		mS
Input Capacitance	C_{iss}	$V_{DS}=10V, V_{GS}=0V, f=1MHz$		4		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS}=10V, V_{GS}=0V, f=1MHz$		1.1		pF
Static Drain-to-Source On-State Resistance	$R_{DS(on)}$	$V_{DS}=10mV, V_{GS}=0V$		200		Ω

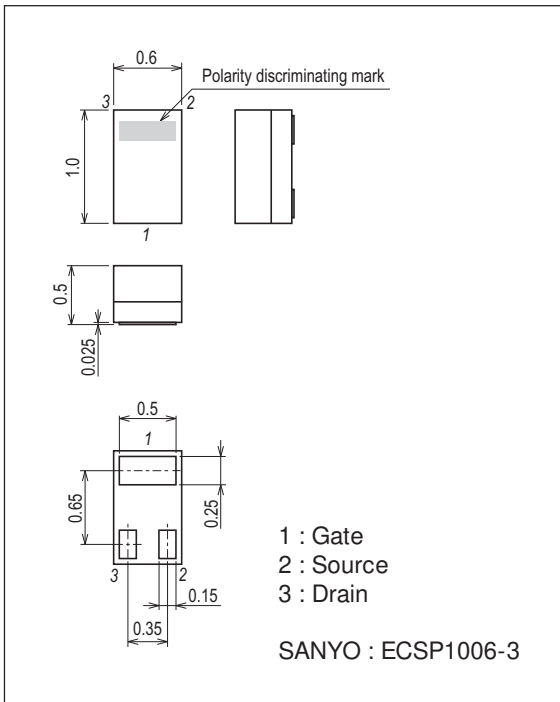
* : The EC3A04B is classified by I_{DSS} as follows : (unit : mA).

Rank	2	3
I_{DSS}	0.6 to 1.5	1.2 to 3.0

Package Dimensions

unit : mm (typ)

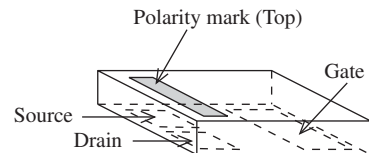
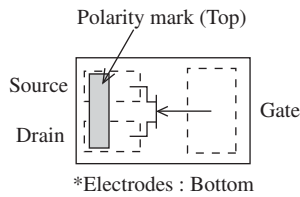
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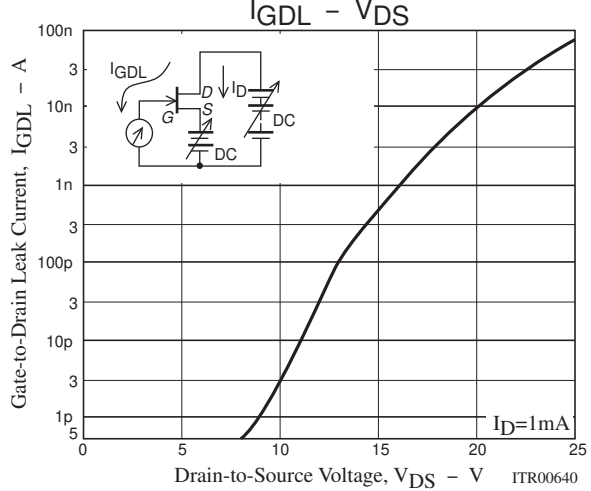
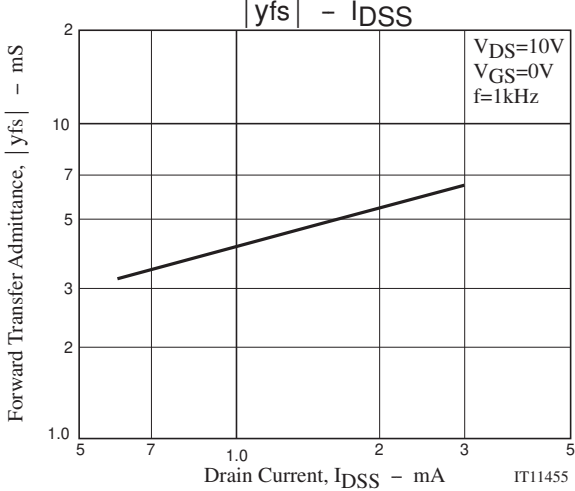
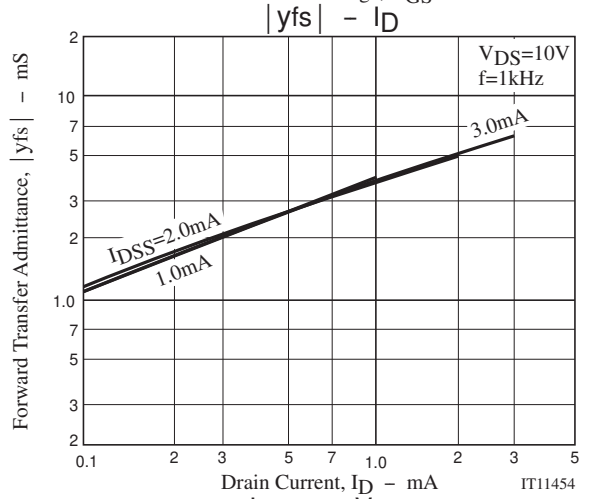
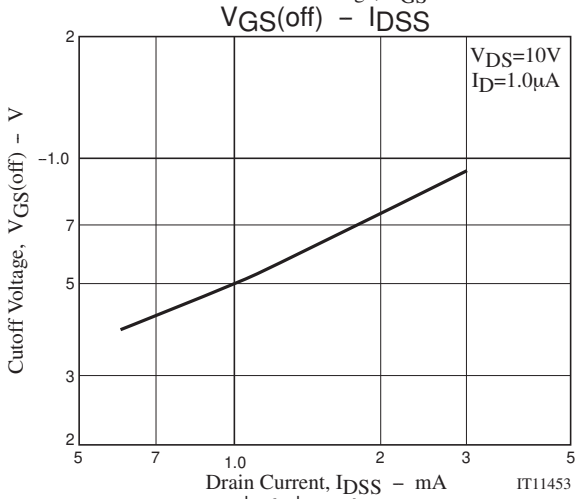
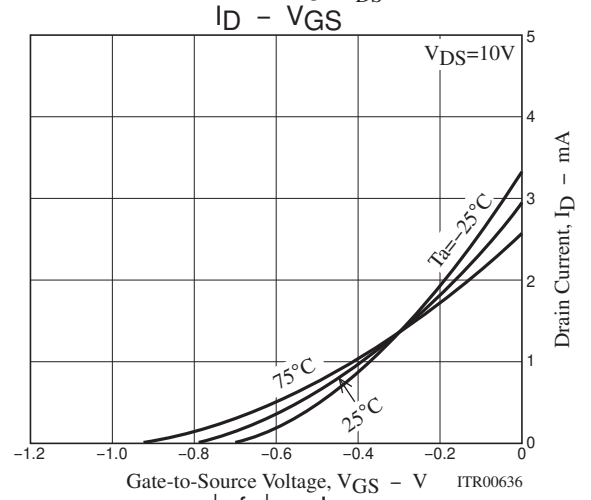
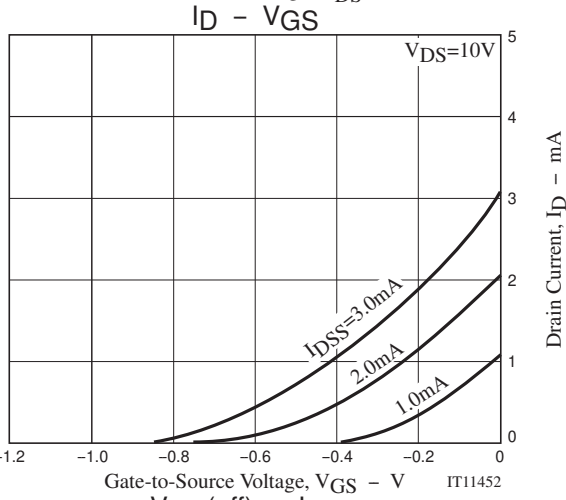
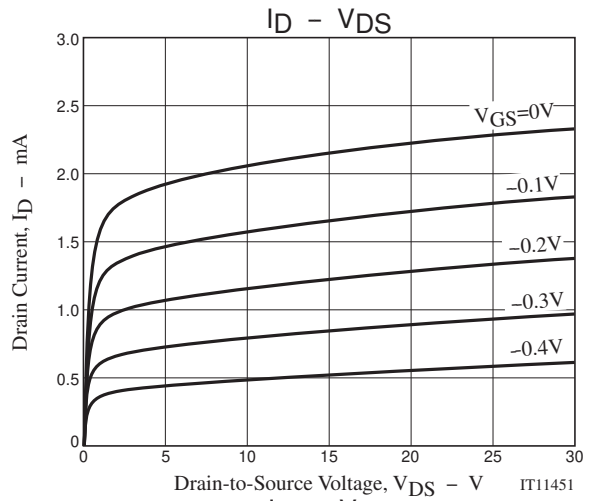
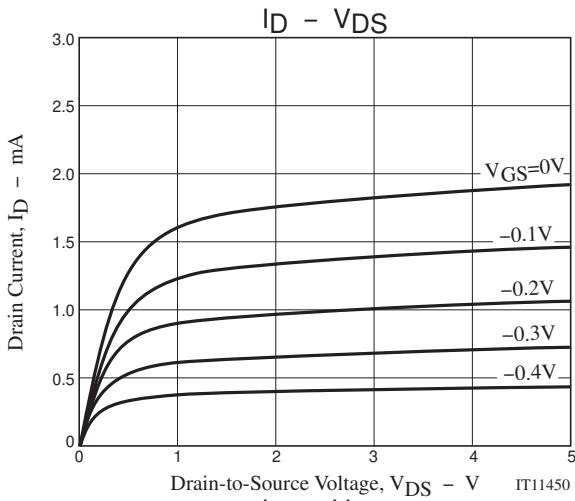
Type No. Indication (Top view)

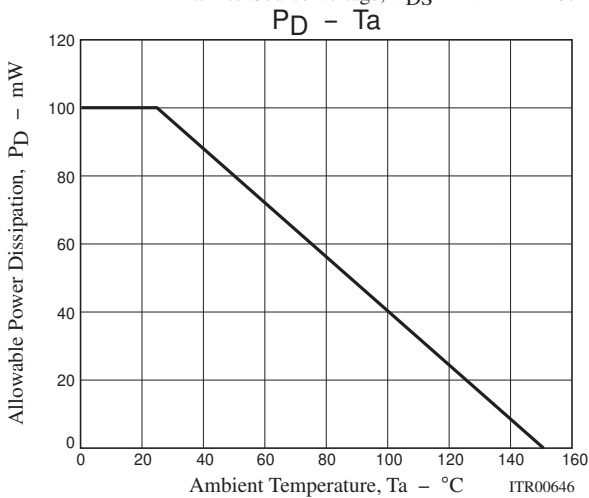
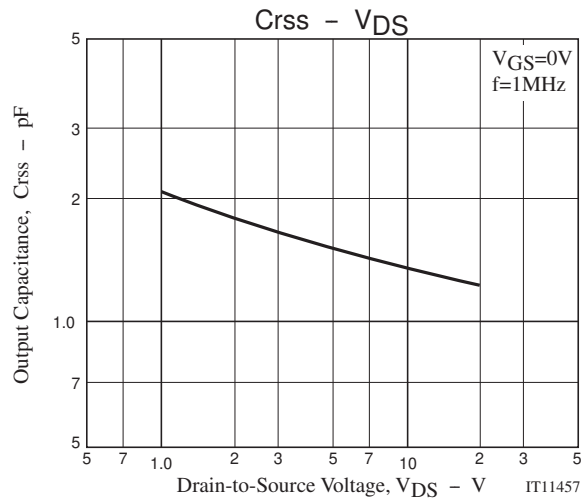
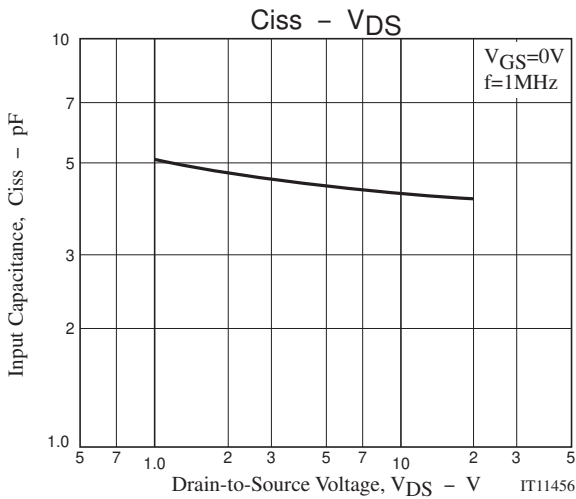


Electrical Connection (Top view)



EC3A04B





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