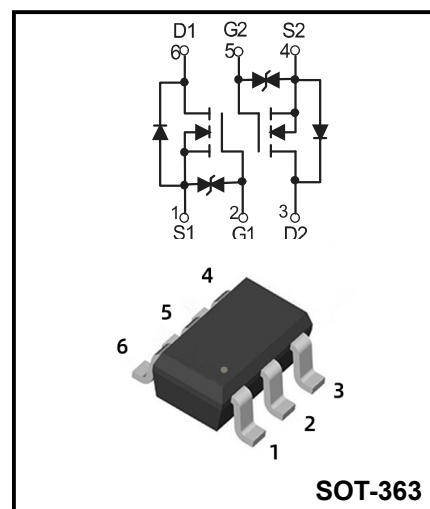


Dual N-Channel MOSFET

MAIN CHARACTERISTICS

I_D	0.75A
V_{DS}	20V
$V_{GS}=4.5V, I_D=0.65A$	$<380m\Omega$ (Type: 270 m Ω)
$V_{GS}=2.5V, I_D=0.55A$	$<450m\Omega$ (Type: 320 m Ω)
$V_{GS}=1.8V, I_D=0.45A$	$<800m\Omega$ (Type: 390 m Ω)



FEATURE

- ◆ Lead Free Product is Acquired
- ◆ Surface Mount Package
- ◆ N-Channel Switch with Low $R_{DS(on)}$
- ◆ Operated at Low Logic Level Gate Drive
- ◆ Equivalent to Two YFW3134K

APPLICATION

- ◆ Load/Power Switching
- ◆ Interfacing Switching
- ◆ Battery Management for Ultra Small Portable Electronics
- ◆ Logic Level Shift

Marking Code

YFW3134KDW	.34K
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ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-source voltage	V_{DS}	20	V
Typical Gate-source voltage	V_{GS}	± 12	V
Continuous drain current ($t \leq 10s$)	I_D	0.75	A
Power dissipation*	P_D	0.15	W
Thermal resistance from junction to ambient	$R_{\theta JA}$	833	$^\circ\text{C/W}$
Junction temperature	T_J	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55~ +150	$^\circ\text{C}$

* Repetitive rating : Pulse width limited by junction temperature.

Ta =25 °C unless otherwise specified

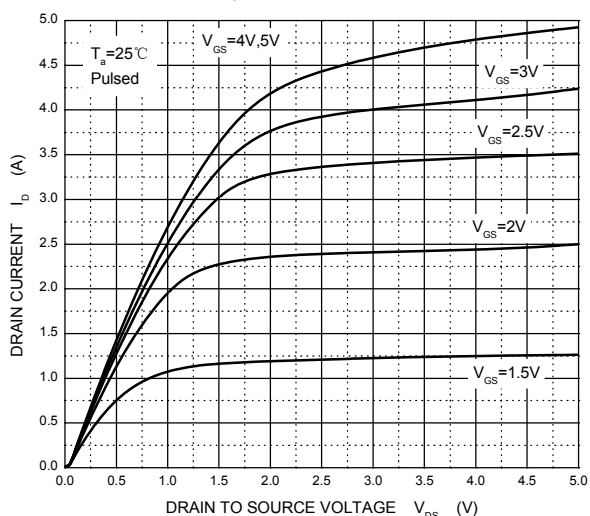
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
STATIC PARAMETERS						
Drain-source breakdown voltage	V _{(BR) DSS}	V _{GS} = 0V, I _D =250μA	20			V
Zero gate voltage drain current	I _{DSS}	V _{DS} =20V, V _{GS} = 0V			1	μA
Gate-body leakage current	I _{GSS}	V _{GS} =±10V, V _{DS} = 0V			±20	μA
Gate threshold voltage (note 1)	V _{GS(th)}	V _{DS} =V _{GS} , I _D =250μA	0.35	0.54	1.1	V
Drain-source on-resistance (note 1)	R _{DS(on)}	V _{GS} =4.5V, I _D =0.65A		270	380	mΩ
		V _{GS} =2.5V, I _D =0.55A		320	450	mΩ
		V _{GS} =1.8V, I _D =0.45A		390	800	mΩ
Forward tranconductance (note 1)	g _{FS}	V _{DS} =10V, I _D =0.8A		1.6		S
Diode forward voltage(note 1)	V _{SD}	I _S =0.15A, V _{GS} = 0V			1.2	V
DYNAMIC PARAMETERS (note 2)						
Input Capacitance	C _{iss}	V _{DS} =16V, V _{GS} =0V, f =1MHz		79	120	pF
Output Capacitance	C _{oss}			13	20	pF
Reverse Transfer Capacitance	C _{rss}			9	15	pF
SWITCHING PARAMETERS(note 2)						
Turn-on delay time	t _{d(on)}	V _{GS} =4.5V, V _{DS} =10V, I _D =0.5A, R _{GEN} =10Ω		6.7		ns
Turn-on rise time	t _r			4.8		ns
Turn-off delay time	t _{d(off)}			17.3		ns
Turn-off fall time	t _f			7.4		ns
Total Gate Charge	Q _g	V _{DS} =10V, V _{GS} =4.5V, I _D =0.25A		750		pC
Gate-Source Charge	Q _{gs}			75		pC
Gate-Drain Charge	Q _{gd}			225		pC

Notes :

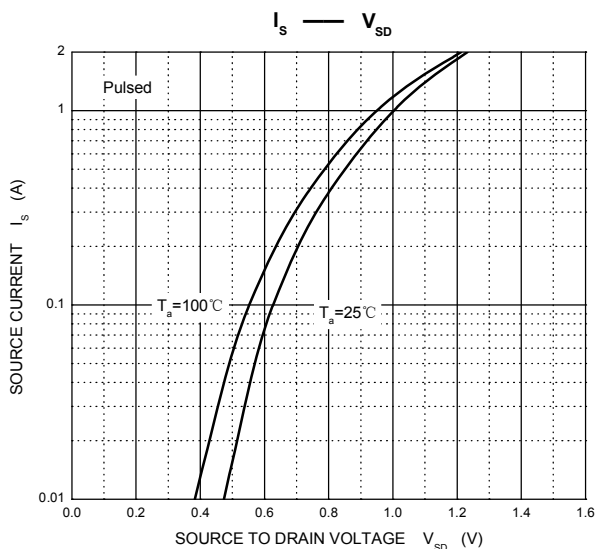
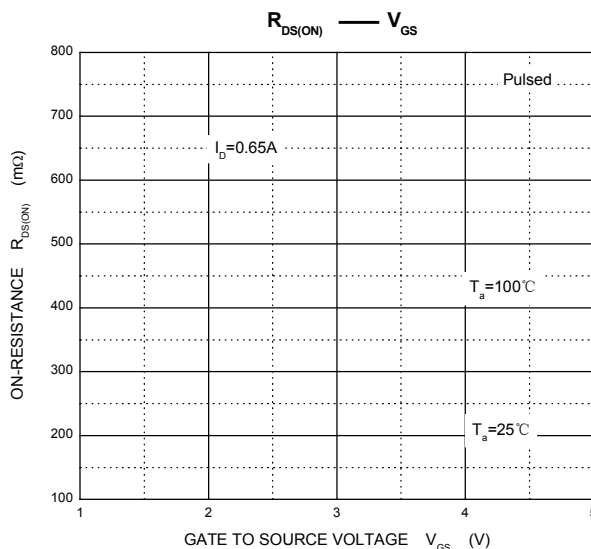
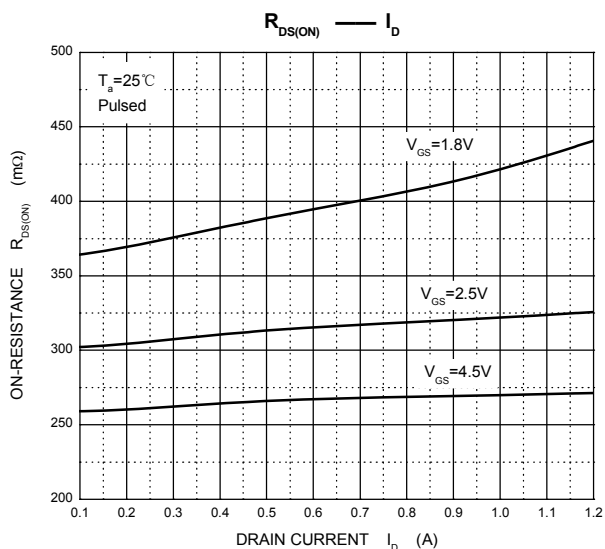
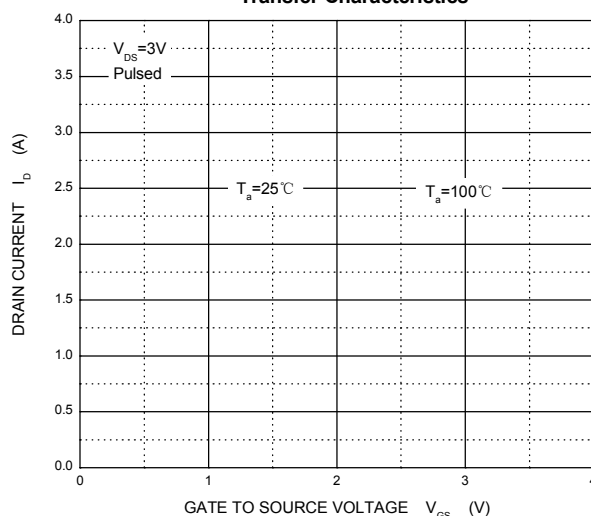
1. Pulse Test : Pulse width $\leq 300\mu s$, duty cycle $\leq 0.5\%$.
2. Guaranteed by design, not subject to production testing.

Typical Characteristics

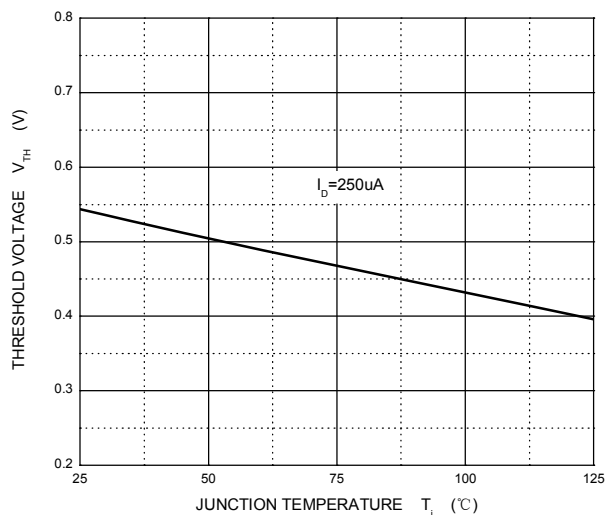
Output Characteristics



Transfer Characteristics



Threshold Voltage



Ordering information

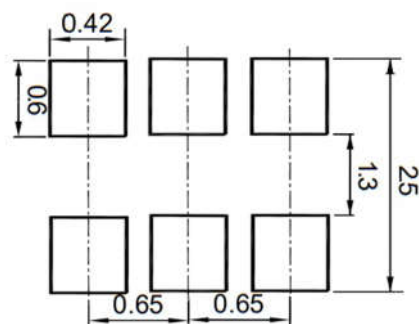
Package	Packing Description	Packing Quantity
SOT-363	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOT-363

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.8	1.1	32	43
A1	-	0.1	-	3.94
bp	0.20	0.30	7.87	11.81
c	0.10	0.25	3.94	9.84
D	1.8	2.2	70.87	86.61
E	1.15	1.35	45.28	53.15
e	1.3		51.18	
e1	0.65		25.6	
HE	2.0	2.2	78.74	86.6
Lp	0.15	0.45	5.90	17.71
Q	0.15	0.25	5.90	9.84
v	0.2		7.78	
w	0.2		7.78	
y	0.1		3.94	

The recommended mounting pad size



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