



UP672

Preliminary

Power MOSFET

N-CHANNEL MOSFET ARRAY FOR SWITCHING

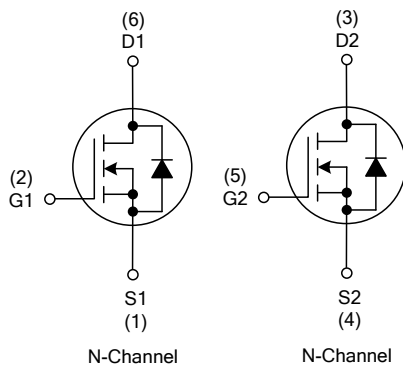
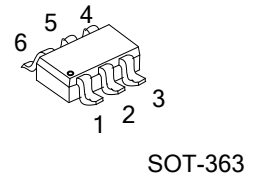
DESCRIPTION

The UTC **UP672** includes two MOSFET devices in a SOT-363 package. It achieves high-density mounting and saves mounting costs.

FEATURES

* Automatic mounting supported

SYMBOL



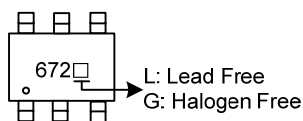
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment						Packing
Lead Free	Halogen Free		1	2	3	4	5	6	
UP672L-AL6-R	UP672G-AL6-R	SOT-363	S1	G1	D2	S2	G2	D1	Tape Reel

Note: Pin Assignment: G: Gate D: Drain S: Source

UP672L - AL6 - R	(1) Packing Type	(1) R: Tape Reel
	(2) Package Type	(2) AL6: SOT-363
	(3) Lead Free	(3) L: Lead Free, G: Halogen Free

MARKING



■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$)

PARAMETER		SYMBOL	RATINGS	UNIT
Drain-Source Voltage		V_{DSS}	50	V
Gate-Source Voltage		V_{GSS}	± 7.0	V
Drain Current	Continuous	I_{D}	100	mA
	Pulsed (Note 1)	I_{DM}	200	mA
Total Power Dissipation		P_{D}	200	mW
Channel Temperature		T_{CH}	150	$^{\circ}\text{C}$
Storage Temperature Range		T_{STG}	$-55 \sim +150$	$^{\circ}\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

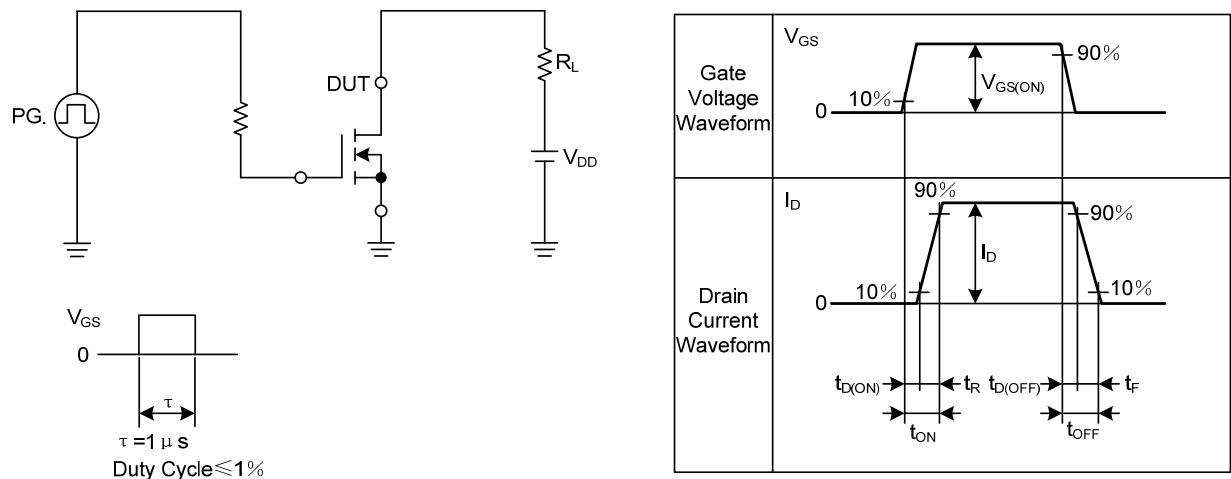
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

1. $PW \leq 10\text{ms}$, Duty Cycle $\leq 50\%$

■ ELECTRICAL CHARACTERISTICS ($T_C=25^{\circ}\text{C}$, unless otherwise specified)

PARAMETER		SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
OFF CHARACTERISTICS							
Drain-Source Breakdown Voltage		BV _{DSS}	I _D =250μA, V _{GS} =0V	50			V
Drain-Source Leakage Current		I _{DSS}	V _{DS} =50V, V _{GS} =0V			10	μA
Gate-Source Leakage Current	Forward	I _{GSS}	V _{DS} =0V ,V _{GS} =7.0V			5.0	μA
	Reverse		V _{DS} =0V ,V _{GS} =-7.0V			-5.0	μA
ON CHARACTERISTICS							
Gate Threshold Voltage		V _{GS(ON)}	V _{DS} =3.0V, I _D =1.0μA	0.7	1.0	1.5	V
Drain-Source On-State Resistance		R _{DS(ON)1}	V _{GS} =2.5V, I _D =10mA		20	40	Ω
		R _{DS(ON)2}	V _{GS} =4.0V, I _D =10mA		15	20	Ω
Forward Transconductance		y _{FS}	V _{DS} =3.V, I _D =10mA	20			mS
DYNAMIC PARAMETERS							
Input Capacitance		C _{ISS}	V _{DS} =3.0V, V _{GS} =0V, f=1.0MHz		6		pF
Output Capacitance		C _{OSS}			8		pF
Reverse Transfer Capacitance		C _{RSS}			1.2		pF
SWITCHING PARAMETERS							
Turn-ON Delay Time		t _{D(ON)}	V _{DD} =3V,I _D =20mA, V _{GS(ON)} =3V, R _G =10Ω, R _L =120Ω		9		ns
Turn-ON Rise Time		t _R			50		ns
Turn-OFF Delay Time		t _{D(OFF)}			20		ns
Turn-OFF Fall Time		t _F			40		ns

SWITCHING TIME MEASUREMENT CIRCUIT AND CONDITIONS



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