



UP672

Power MOSFET

N-CHANNEL MOSFET ARRAY FOR SWITCHING

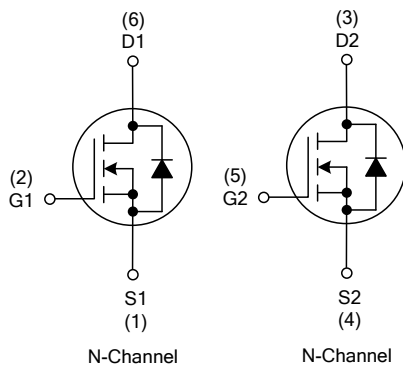
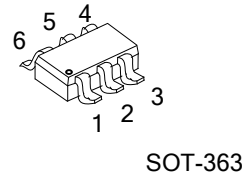
DESCRIPTION

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



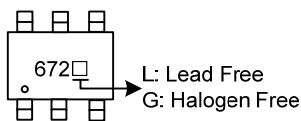
ORDERING INFORMATION

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°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 2)	I _{DM}	200	mA
Total Power Dissipation		P _D	200	mW
Channel Temperature		T _{CH}	150	°C
Storage Temperature Range		T _{STG}	-55 ~ +150	°C

Notes: 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged.

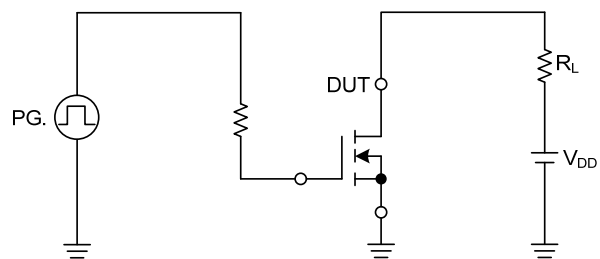
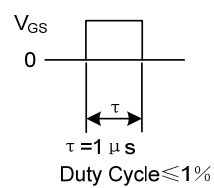
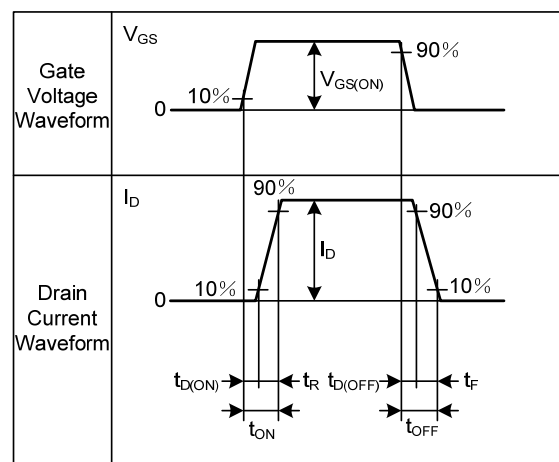
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

2. PW ≤ 10ms, Duty Cycle ≤ 50%

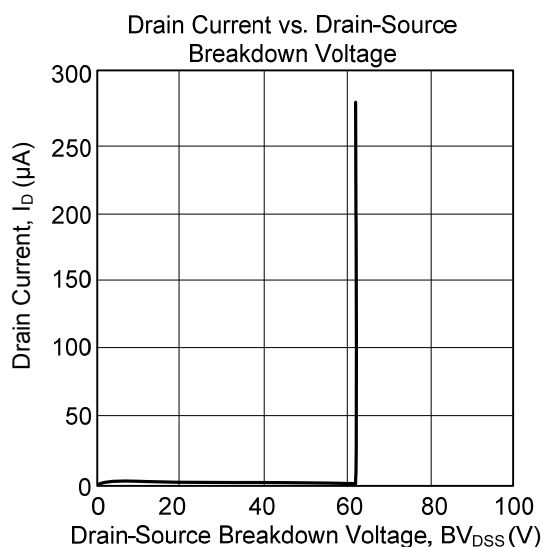
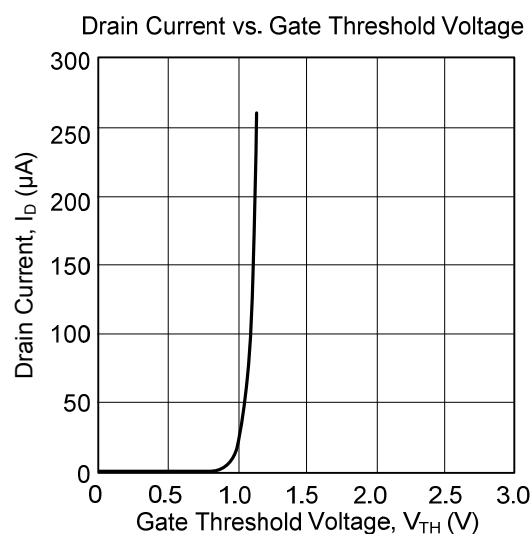
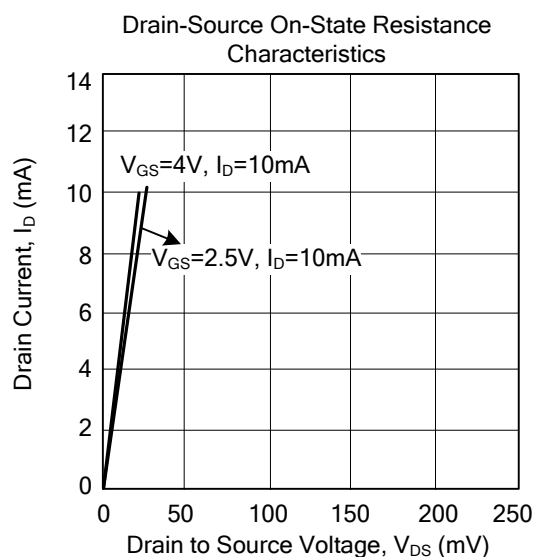
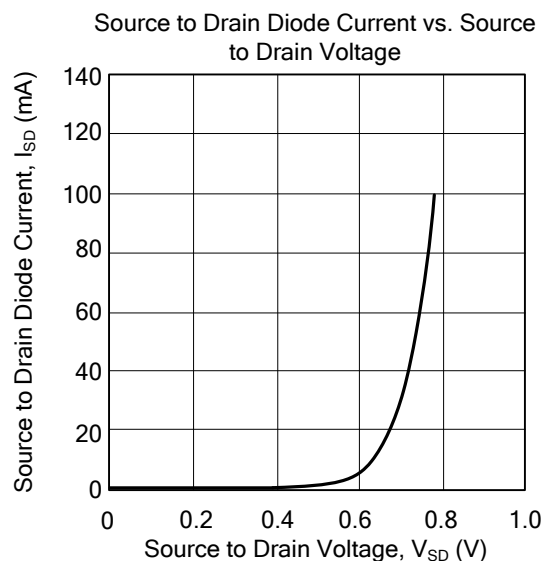
■ ELECTRICAL CHARACTERISTICS (T_C=25°C, unless otherwise specified)

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		3	40	Ω
		R _{DS(ON)2}	V _{GS} =4.0V, I _D =10mA		2.3	20	Ω
Forward Transconductance		y _{FS}	V _{DS} =3.0V, I _D =10mA	20			mS
DYNAMIC PARAMETERS							
Input Capacitance		C _{ISS}	V _{DS} =3.0V, V _{GS} =0V, f=1.0MHz		27		pF
Output Capacitance		C _{OSS}			17		pF
Reverse Transfer Capacitance		C _{RSS}			11		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		30		ns
Turn-ON Rise Time		t _R			18		ns
Turn-OFF Delay Time		t _{D(OFF)}			42		ns
Turn-OFF Fall Time		t _F			12.5		ns

SWITCHING TIME MEASUREMENT CIRCUIT AND CONDITIONS



■ TYPICAL CHARACTERISTICS



UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.