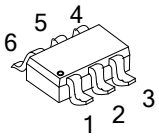
N-CHANNEL MOSFET ARRAY FOR SWITCHING



SOT-363

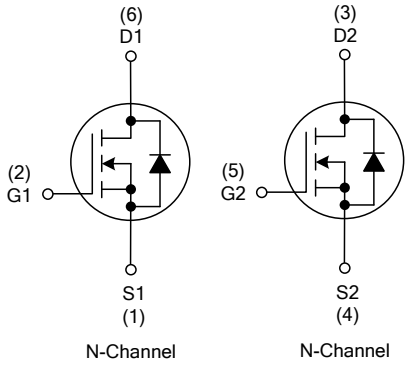
■ DESCRIPTION

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

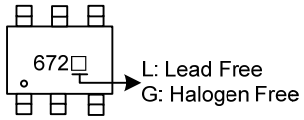
Ordering Number		Package	Pin Assignment						Packing
Lead Free	Halogen Free		1	2	3	4	5	6	
UP672L-AL6-R	UP672G-AL6-R	SOT-363	S1	G1	D2	S2	G2	D1	Tape Reel

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 1)	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

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 ≤ 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		$V_{GS(OFF)}$	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