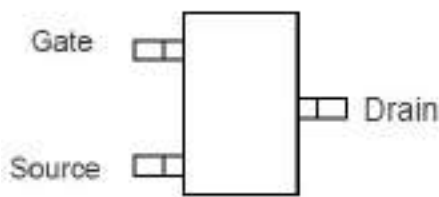


DESCRIPTION

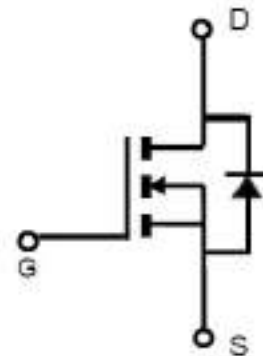
The TCS1630 is the N-Channel logic enhancement mode power field effect transistor is produced using high cell density advanced trench technology..

This high density process is especially tailored to minimize on-state resistance. These devices are particularly suited for low voltage application, and low in-line power loss are needed in a very small outline surface mount package.

PIN CONFIGURATION



TOP VIEW
SOT-23L



N-Channel

ORDERING INFORMATION

Part Number	Package Code	Package	Shipping
TCS1630_C	S	SOT23-3L	3000EA / T&R

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

Symbol	Parameter	Typical	Unit
V_{DSS}	Drain-Source Voltage	60	V
V_{GSS}	Gate-Source Voltage	± 20	V
I_D	Continuous Drain Current ($T_J=150^\circ\text{C}$)	$V_{GS}=10.0\text{V}$ 3.0	A
I_{DM}	Pulsed Drain Current	10	A
I_S	Continuous Source Current (Diode Conduction)	1	A
P_D	Power Dissipation	$T_A=25^\circ\text{C}$	1.25(SOT23-3L)
		$T_A=75^\circ\text{C}$	0.8(SOT23-3L)
T_J	Operation Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature Range	-55~+150	$^\circ\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress rating only and functional device operation is not implied

FEATURE

- ◆ 60V/ 3.0 A, $R_{DS(ON)}=70\text{m}\Omega$ (typ.)@ $V_{GS}=10\text{V}$
- ◆ 60V/ 3.0 A, $R_{DS(ON)}=78\text{m}\Omega$ (typ.)@ $V_{GS}=4.5\text{V}$
- ◆ Super high design for extremely low $R_{DS(ON)}$
- ◆ Exceptional on-resistance and Maximum DC current capability
- ◆ This is a Full RoHS compliance
- ◆ SOT23-3L package design

APPLICATIONS

- ◆ Power Management in Note Book
- ◆ Portable Equipment
- ◆ Battery Powered System