

General Description

The 4932L uses advanced trench technology and design to provide excellent RDS(ON) with low gate charge. It can be used in a wide variety of applications.

Features

- P-Channel
- Low ON-resistance
- Fast Switching
- 100% avalanche tested

Absolute Maximum Ratings

Symbol	Parameter	Rating	Units
V_{DS}	Drain-Source Voltage	-60	V
V_{GS}	Gate-Source Voltage	± 20	V
$I_D@T_C=25^{\circ}C$	Continuous Drain Current	-35	A
$I_D@T_C=100^{\circ}C$	Continuous Drain Current	-28	A
I_{DM}	Pulsed Drain Current	-105	A
E_{AS}	Single Pulse Avalanche Energy	-180	mJ
$P_D@T_C=25^{\circ}C$	Total Power Dissipation	90	W
T_{STG}	Storage Temperature Range	-55 to +150	$^{\circ}C$
T_J	Operating Junction Temperature Range	-55 to +150	$^{\circ}C$

Thermal Data

Symbol	Parameter	Typ.	Max.	Unit
$R_{\theta JA}$	Thermal Resistance Junction-ambient	---	75	$^{\circ}C/W$
$R_{\theta JC}$	Thermal Resistance Junction-case	---	1.25	$^{\circ}C/W$

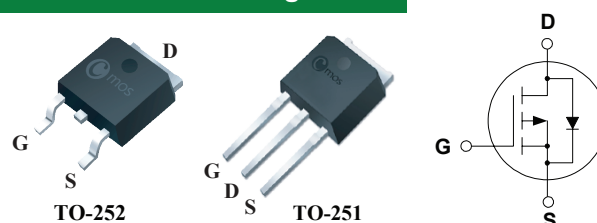
Product Summary

BVDSS	RDS(ON)	ID
-60V	33m Ω	-35A

Applications

- Motor drive
- DC / DC converter

TO-252/251 Pin Configuration



Type	Package	Marking
CMD4932L	TO-252	CMD4932L
CMU4932L	TO-251	CMU4932L

Electrical Characteristics ($T_J=25^\circ\text{C}$, unless otherwise noted)

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
BV_{DS}	Drain-Source Breakdown Voltage	$V_{GS}=0V$, $I_D=-250\mu A$	-60	---	---	V
$R_{DS(ON)}$	Static Drain-Source On-Resistance	$V_{GS}=-10V$, $I_D=-20A$	---	---	33	$m\Omega$
		$V_{GS}=-4.5V$, $I_D=-15A$	---	---	40	$m\Omega$
$V_{GS(th)}$	Gate Threshold Voltage	$V_{GS}=V_{DS}$, $I_D=-250\mu A$	-1	---	-3	V
I_{DSS}	Drain-Source Leakage Current	$V_{DS}=-60V$, $V_{GS}=0V$	---	---	-1	μA
		$V_{DS}=-60V$, $V_{GS}=0V$, $T_J=55^\circ\text{C}$	---	---	-5	μA
I_{GSS}	Gate-Source Leakage Current	$V_{GS}=\pm 20V$, $V_{DS}=0V$	---	---	± 100	nA
g_{fs}	Forward Transconductance	$V_{DS}=-10V$, $I_D=-10A$	---	20	---	S
Q_g	Total Gate Charge	$I_D=-20A$	---	38	---	nC
Q_{gs}	Gate-Source Charge	$V_{DS}=-30V$	---	11	---	
Q_{gd}	Gate-Drain Charge	$V_{GS}=-10V$	---	9	---	
$T_{d(on)}$	Turn-On Delay Time	$V_{DS}=-30V$	---	13	---	ns
T_r	Rise Time	$V_{GS}=-10V$	---	16	---	
$T_{d(off)}$	Turn-Off Delay Time	$R_{GEN}=1.5\Omega$	---	39	---	
T_f	Fall Time	$R_L=3\Omega$	---	16	---	
C_{iss}	Input Capacitance	$V_{DS}=-30V$, $V_{GS}=0V$, $f=1\text{MHz}$	---	3500	---	pF
C_{oss}	Output Capacitance		---	225	---	
C_{rss}	Reverse Transfer Capacitance		---	178	---	

Diode Characteristics

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
I_S	Continuous Source Current	$V_G=V_D=0V$, Force Current	---	---	-35	A
I_{SM}	Pulsed Source Current		---	---	-105	A
V_{SD}	Diode Forward Voltage	$V_{GS}=0V$, $I_F=-20A$	---	---	-1.2	V

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