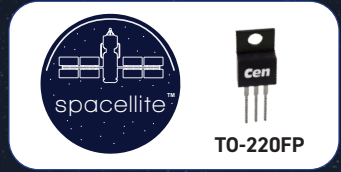


Product Brief



spacellite-Commercial CSLCDM22011-225F 11A, 225V Low $r_{DS(ON)}$ N-Channel MOSFETs

RADIATION TESTED COMMERCIAL DEVICES
IDEAL FOR LOW EARTH ORBIT (LEO) SATELLITE POWER SUPPLIES



what is spacellite-C™

Spacellite-Commercial (or Spacellite-C) semiconductors are radiation tested commercial devices designed to meet radiation effects experienced by commercial satellite applications.



why spacellite-C™

Spacellite-C devices meet radiation specifications ideal for LEO (low earth orbit) applications at a reduced cost while meeting exceptionally high quality and reliability standards.

spacellite-C™ options

- Various other plastic and hermetic packages possible
- Bare die available
- Optional gold wire bonds

Note: Standard Spacellite devices qualified to the PEMS-INST-001 test flow and fully certified are scheduled for release in Q4-22.

Features

- High voltage capability
- Low gate charge ($Q_{GS}=4.45nC$ TYP)
- Low $r_{DS(ON)}$ (0.3Ω TYP)

Applications

- Satellite power supplies
- Solar panel inverters
- DC-DC converters

Samples

Spacellite-C samples are available upon request.

Please contact your Central Sales representative to learn more about the Spacellite up-screening test flows and certifications.

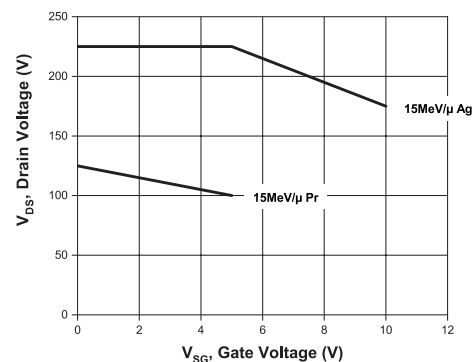
Central Item No.	Maximum Ratings: ($T_A = 25^\circ C$)				Electrical Characteristics: ($T_A = 25^\circ C$)								Case Type		
	I_D	P_D	T_J, T_{stg}	Θ_{JA}	BV_{DSS}	$V_{GS(th)}$		$r_{DS(ON)}$		@ V_{GS}	@ I_D	$Q_g(tot)$		C_{iss}	C_{rss}
	(A)	(W)	($^\circ C$)	($^\circ C/W$)	(V)	MIN	MAX	(Ω)	(Ω)	(V)	(A)	(nC)		(pF)	(pF)
CSLCDM22011-225F	11	25	-55 to +150	120	600	2.0	4.0	0.30	0.36	10	5.5	23.05	763	2.76	TO-220FP
CSLCDM22011-225F Post-TID*: <i>See below for conditions.</i>					600	0.4	1.6	--	0.36	10	5.5				

*TID: TEST CONDITIONS:
10 kRad(Si) $V_{GS}=15V, V_{DS}=0$

Also tested for Single Event Burnout (SEB) and Single Event Gate Rupture (SEGR)

Single Event Effect Safe Operating Area:		
Ion	Range	Let
Ag	111.2 μm	44.9MeV-cm ² /mg
Pr	117.0 μm	61.3MeV-cm ² /mg

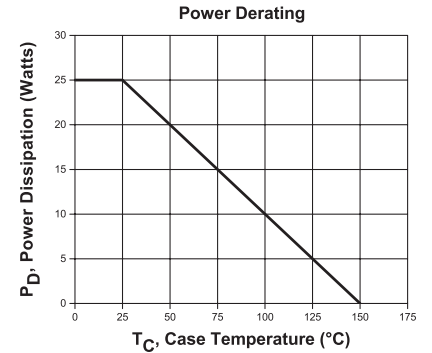
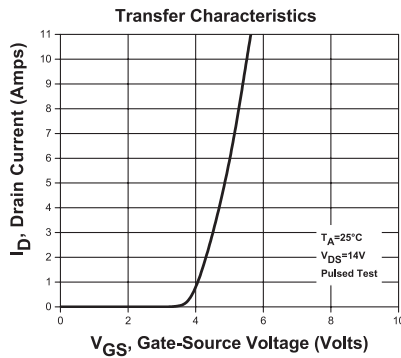
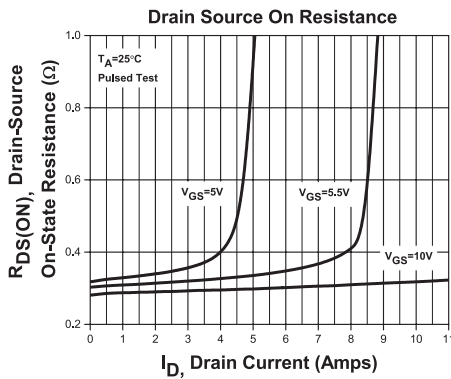
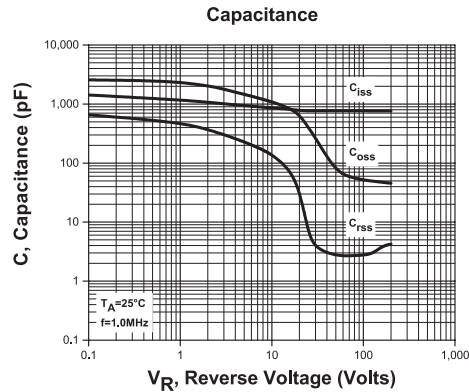
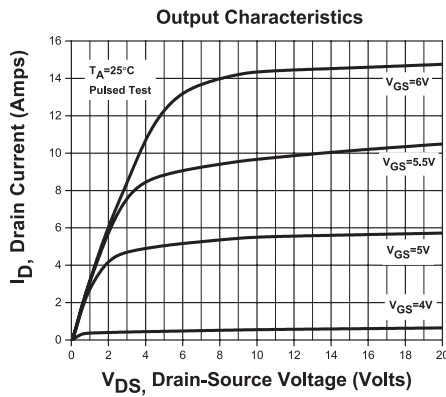
Safe Operating Area



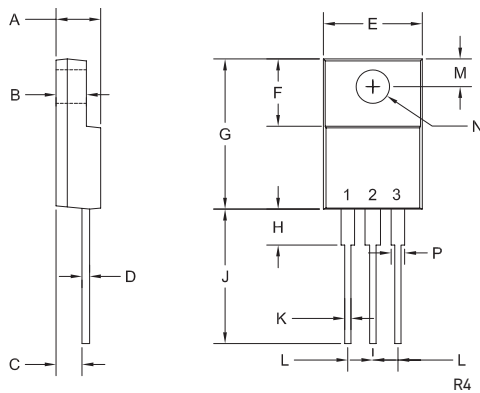
Latest hi-rel test flows available online:
Visit www.centrasemi.com/mil-equivalent-packaged.

SPICE Models, Package Details and other technical resources:
Engineering resources are available at www.centrasemi.com.

Typical Electrical Characteristics:



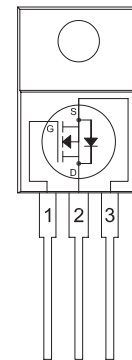
Mechanical Drawing: TO-220FP



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.165	0.202	4.20	5.12
B	0.090	0.130	2.30	3.30
C	0.098	0.122	2.50	3.10
D	-	0.031	-	0.80
E	0.382	0.418	9.70	10.63
F	0.238	0.276	6.06	7.00
G	0.583	0.640	14.80	16.25
H	-	0.161	-	4.10
J	0.506	0.543	12.85	13.80
K	0.020	0.031	0.50	0.79
L	-	0.100	-	2.54
M	0.120	0.140	3.05	3.55
N (DIA)	0.116	0.134	2.95	3.40
P	0.039	0.058	1.00	1.47

TO-220FP (REV: R4)

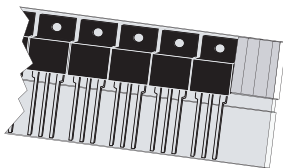
Pin Configuration



LEAD CODE:
 1) Gate
 2) Drain
 3) Source

MARKING CODE:
 CSLC11225
 TO-220FP
 [D/C]

Packing Configuration



TO-220FP
 Antistatic Sleeve

Sleeve Packing Quantity:
 50 devices

For more information on Central's products and solutions:

Call us at: **1.631.435.1110**

Or view online: www.centralsemi.com/featured-products

Custom
 Solutions
 Available

