

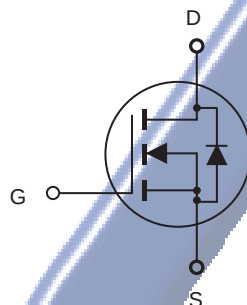
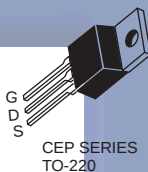
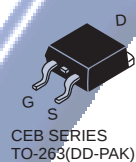


CEP13N07/CEB13N07

N-Channel Enhancement Mode Field Effect Transistor

FEATURES

- 70V, 13A, $R_{DS(ON)} = 125m\Omega$ @ $V_{GS} = 10V$.
 $R_{DS(ON)} = 150m\Omega$ @ $V_{GS} = 5V$.
- Super high dense cell design for extremely low $R_{DS(ON)}$.
- High power and current handling capability.
- Lead free product is acquired.
- TO-220 & TO-263 package.



ABSOLUTE MAXIMUM RATINGS $T_C = 25^\circ\text{C}$ unless otherwise noted

Parameter	Symbol	Limit	Units
Drain-Source Voltage	V_{DS}	70	V
Gate-Source Voltage	V_{GS}	± 20	V
Drain Current-Continuous	I_D	13	A
Drain Current-Pulsed ^a	I_{DM}	52	A
Maximum Power Dissipation @ $T_C = 25^\circ\text{C}$ - Derate above 25°C	P_D	45 0.3	W W/ $^\circ\text{C}$
Single Pulsed Avalanche Energy ^d	E_{AS}	85	mJ
Single Pulsed Avalanche Current ^d	I_{AS}	11	A
Operating and Store Temperature Range	T_J, T_{stg}	-55 to 175	$^\circ\text{C}$

Thermal Characteristics

Parameter	Symbol	Limit	Units
Thermal Resistance, Junction-to-Case	$R_{\theta JC}$	3.35	$^\circ\text{C/W}$
Thermal Resistance, Junction-to-Ambient	$R_{\theta JA}$	62.5	$^\circ\text{C/W}$



Electric

Off Chara
Drain-Sou
Zero Gate
Gate Body
Gate Body
On Chara
Gate Thre
Static Dra
On-Resist
Forward T
Dynamic
Input Cap
Output Ca
Reverse T
Switching
Turn-On D
Turn-On F
Turn-Off D
Turn-Off F
Total Gate
Gate-Sou
Gate-Drai
Drain-Sou
Drain-Sou
Drain-Sou

Notes :

a.Repetitive Ra

b.Pulse Test : P

c.Guaranteed b

d.L = 870nH, I_A