

SWITCHING REGULATOR APPLICATIONS

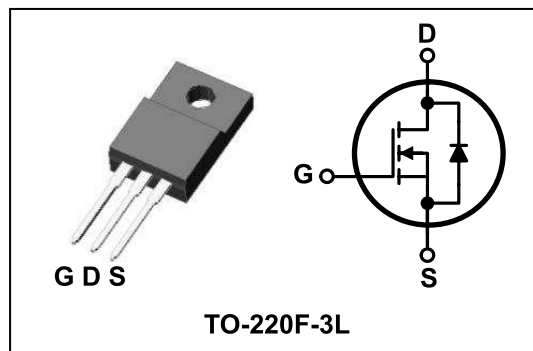
Features

- High Voltage: $BV_{DSS}=650V(\text{Min.})$
- Low C_{rSS} : $C_{rSS}=13pF(\text{Typ.})$
- Low gate charge : $Qg=32nC(\text{Typ.})$
- Low $R_{DS(on)}$: $R_{DS(on)}=1.2\Omega(\text{Typ.})$

Ordering Information

Type No.	Marking	Package Code
STK0765BF	STK0765	TO-220F-3L

PIN Connection



Absolute maximum ratings

($T_c=25^\circ\text{C}$)

Characteristic	Symbol	Rating	Unit
Drain-source voltage	V_{DSS}	650	V
Gate-source voltage	V_{GSS}	± 30	V
Drain current (DC)	I_D	($T_c=25^\circ\text{C}$)	7
		($T_c=100^\circ\text{C}$)	4.4
Drain current (Pulsed) *	I_{DP}	28	A
Drain power dissipation	P_D	52	W
Single pulsed avalanche energy ②	E_{AS}	340	mJ
Avalanche current (Repetitive) ①	I_{AR}	5.2	A
Repetitive avalanche energy ①	E_{AR}	13	mJ
Junction temperature	T_J	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55~150	

* Limited by maximum junction temperature

Characteristic		Symbol	Typ.	Max	Unit
Thermal resistance	Junction-case	$R_{th(J-C)}$	-	2.4	$^\circ\text{C}/\text{W}$
	Junction-ambient	$R_{th(J-a)}$	-	62.5	