

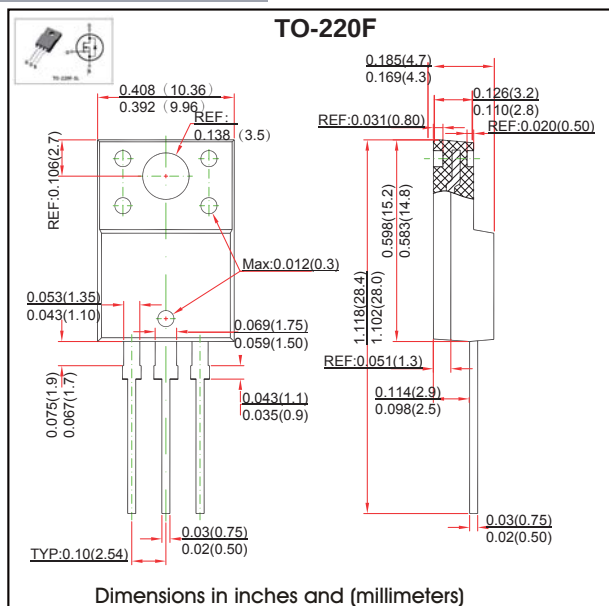
TO-220F Plastic-Encapsulate MOSFETS

FEATURES

- N-Channel Mosfet Transistor
- Drain Current $-I_D = 8.5A @ TC=25^{\circ}C$
- Drain Source Voltage- : $VDSS = 600V(\text{Min})$
- Static Drain-Source On-Resistance : $R_{DS(on)} = 1.0\Omega(\text{Max})$
- Avalanche Energy Specified
- Fast Switching
- Simple Drive Requirement

MECHANICAL DATA

- Case style:TO-220F molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

SYMBOL	PARAMETER	VALUE	UNIT
VDSS	Drain-Source Voltage	600	V
VGS	Gate-Source Voltage-Continuous	± 20	V
ID	Drain Current-Continuous	8.5	A
IDM	Drain Current-Single Plused	34	A
PD	Total Dissipation @TC=25°C	125	W
Tj	Max. Operating Junction Temperature	150	°C
Tstg	Storage Temperature	-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth j-c	Thermal Resistance, Junction to Case	1.0	°C/W
Rth j-a	Thermal Resistance, Junction to Ambient	62.5	°C/W

RATINGS AND CHARACTERISTIC CURVES

MOSFET ELECTRICAL CHARACTERISTICS $T_A=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0; I_D=0.25\text{mA}$	600		V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}; I_D=0.25\text{mA}$	2	4	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}; I_D=5\text{A}$		1.0	Ω
I_{GSS}	Gate-Body Leakage Current	$V_{GS}=\pm 20\text{V}; V_{DS}=0$		± 100	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=600\text{V}; V_{GS}=0$		1	μA
V_{SD}	Forward On-Voltage	$I_S=8.5\text{A}; V_{GS}=0$		1.7	V