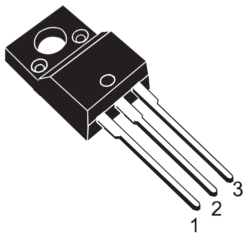
BUL312FP

HIGH VOLTAGE FAST-SWITCHING NPN POWER TRANSISTOR

- HIGH VOLTAGE CAPABILITY
- LOW SPREAD OF DYNAMIC PARAMETERS
- MINIMUM LOT-TO-LOT SPREAD FOR RELIABLE OPERATION
- VERY HIGH SWITCHING SPEED
- FULLY CHARACTERIZED AT 125°C
- LARGE RBSOA
- FULLY INSULATED PACKAGE (U.L. COMPLIANT) FOR EASY MOUNTING



TO-220FP

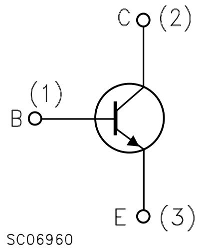
APPLICATIONS

- HORIZONTAL DEFLECTION FOR TV
- SMPS
- ELECTRONIC BALLASTS FOR FLUORESCENT LIGHTING

DESCRIPTION

The BUL312FP is manufactured using high voltage Multi Epitaxial Planar technology for high switching speeds and high voltage capability. It uses a Cellular Emitter structure with planar edge termination to enhance switching speeds while maintaining a wide RBSOA.

INTERNAL SCHEMATIC DIAGRAM



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V_{CES}	Collector-Emitter Voltage ($V_{BE} = 0$)	1150	V
V_{CEO}	Collector-Emitter Voltage ($I_B = 0$)	500	V
V_{EBO}	Emitter-Base Voltage ($I_C = 0$)	9	V
I_C	Collector Current	5	A
I_{CM}	Collector Peak Current (t_p <5 ms)	10	A
I_B	Base Current	3	A
I_{BM}	Base Peak Current (t_p <5 ms)	4	A
P_{tot}	Total Dissipation at Tc = 25 °C	36	W
V_{isol}	Insulation Withstand Voltage (RMS) from All Three Leads to External Heatsink	1500	V
T_{stg}	Storage Temperature	-65 to 150	°C
T_j	Max. Operating Junction Temperature	150	°C