TIGER ELECTRONIC CO.,LTD

Product specification

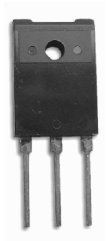
Silicon Diffused Power Transistor **BU2508DF**

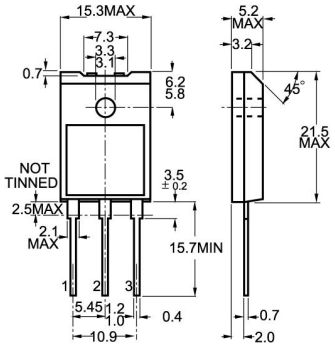
GENERAL DESCRIPTION

Enhanced performance, new generation, high-voltage, high-speed switching npn transistor with an integrated damper diode in a plastic full-pack envelope intended for use in horizontal deflection circuits of colour television receivers. Features exceptional tolerance to base drive and collector current load variations resulting in a very low worst case dissipation.

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	1500	V
Collector-Emitter Voltage	V_{CEO}	700	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	8.0	A
Base Current	I_B	3.5	A
Total Dissipation at	P_{tot}	45	W
Max. Operating Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-65~150	°C





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ELECTRICAL CHARACTERISTICS (Tcase = 25 ℃ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector Cut-off Current	I_{CES}	V_{CB}=1500V, I_E=0	—	—	1.0	mA
Emitter Cut-off Current	I_{EBO}	V_{EB}=7.5V, I_C=0	—	227	—	mA
Collector-Emitter Sustaining Voltage	V_{CEO}	I_C=100mA, I_B=0	700	—	—	V
DC Current Gain	$h_{FE(1)}$	V_{CE}=5.0V, I_C=1.0A	—	13	—	
	$h_{FE(2)}$	V_{CE}=1.0V, I_C=4.5A	4	—	10	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=4.5A,I_B=1.12A	—	—	1.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=4.5A,I_B=1.7A	—	—	1.1	V
Diode forward voltage	V_F	I_F=4.5A	—	1.6	2.0	V