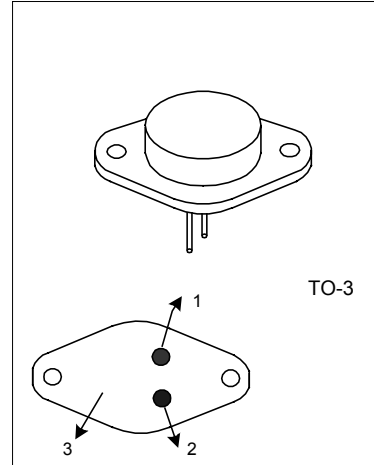


DESCRIPTION

The UTC BU208A is a high voltage, high power, high speed switching NPN transistor in a metal envelope, primarily for use in power supply and horizontal deflection circuits of color television receivers.



1: Base; 2: Emitter; 3: Collector

QUICK REFERENCE DATA

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
Collector-emitter voltage peak value	V _{CESM}	V _{BE} =0V		1500	V
Collector-emitter voltage (open base)	V _{CEO}			700	V
Collector current (DC)	I _C			8	A
Collector current peak value	I _{CM}			15	A
Total power dissipation	P _D	T _c =25°C		150	W
Collector-emitter saturation voltage	V _{CEsat}	I _c =4.5A; I _B =2.0A		1.0	V
Fall time	t _f	I _c =4.5A, I _{B1} =-1/2 I _{B2} =1.8A, V _{cc} =100V		1.0	μs

LIMITING RATINGS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
Collector-emitter voltage peak value	V _{CESM}	V _{BE} =0V		1500	V
Collector-emitter voltage (open base)	V _{CEO}			700	V
Collector current (DC)	I _C			8	A
Collector current peak value	I _{CM}			15	A
Base current (DC)	I _B			2	A
Base current peak value	I _{BM}			4	A
Total power dissipation	P _D	T _c =25°C		150	W
Storage temperature	T _{stg}		-55	+150	°C
Junction temperature	T _j			150	°C

UTC BU208A SILICON DIFFUSED POWER TRANSISTOR

ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
Collector-emitter cut-off current	I_{CE}	$V_{BE}=0V, V_{CE}=V_{CESMmax}$		1.0	mA
Collector-emitter cut-off current	I_{CES}	$V_{BE}=0V, V_{CE}=V_{CESMmax}, T_J=125^{\circ}C$		2.0	mA
Collector-emitter saturation voltage	$V_{CE0(SUS)}$	$I_B=0A, I_C=100mA, L=25mH$	700		V
Collector-emitter saturation voltage	V_{CEsat}	$I_C=4.5A, I_B=2.0A$		1.0	V
Base-emitter saturation voltage	V_{BEsat}	$I_C=4.5A, I_B=2.0A$		1.5	V
DC current gain	H_{fe}	$I_C=1A, V_{CE}=5V$	8		
Transition frequency at $f=1MHz$	f_t	$I_C=0.1A, V_{CE}=10V$	3		MHz
Switching times (16KHz line deflection circuit)	t_s			8.0	μs
Turn-off storage time Turn-off fall time	t_f	$I_C=4.5A, I_{B1}=-1/2 I_{B2}=1.8A, V_{CC}=100V$		1.0	μs

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