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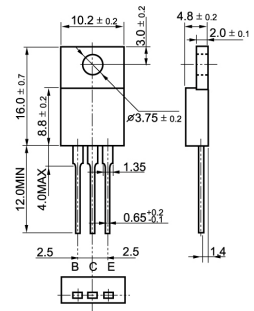
Silicon Epitaxial Planar Transistor

GENERAL DESCRIPTION

Silicon NPN high frequency, high power transistors in a plastic envelope, primarily for use in audio and general purpose



TO-220



QUICK REFERENCE DATA

SYMBOL	PARAMETER	CONDITIONS	TYP	MAX	UNIT
V_{CESM}	Collector-emitter voltage peak value	$V_{BE} = 0V$	-	500	V
V_{CEO}	Collector-emitter voltage (open base)		-	300	V
I_C	Collector current (DC)		-	7	A
I_{CM}	Collector current peak value		-		A
P_{tot}	Total power dissipation	$T_{mb} \leq 25^\circ C$	-	50	W
V_{CEsat}	Collector-emitter saturation voltage	$I_C = 3.0A; I_B = 0.3A$	-	2	V
V_F	Diode forward voltage	$I_F = 3.0A$	1.5	2.0	V
t_f	Fall time	$I_C=3A, I_{B1}=-I_{B2}=0.3A, V_{CC}=60V$	0.4	1.0	μs

LIMITING VALUES

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V_{CESM}	Collector-emitter voltage peak value	$V_{BE} = 0V$	-	500	V
V_{CEO}	Collector-emitter voltage (open base)		-	300	V
V_{EBO}	Emitter-base voltage (open collector)			5	V
I_C	Collector current (DC)		-	7	A
I_B	Base current (DC)		-	2	A
P_{tot}	Total power dissipation	$T_{mb} \leq 25^\circ C$	-	50	W
T_{sta}	Storage temperature		-55	150	$^\circ C$
T_j	Junction temperature		-	150	$^\circ C$

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	TYP	MAX	UNIT
I_{CBO}	Collector-base cut-off current	$V_{CB}=400V$	-	0.2	mA
I_{EBO}	Emitter-base cut-off current	$V_{EB}=5V$	-	0.2	mA
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=1mA$	300		V
V_{CEsat}	Collector-emitter saturation voltages	$I_C = 2.0A; I_B = 0.5A$	-	2	V
h_{FE}	DC current gain	$I_C = 0.8A; V_{CE} = 5V$	15	100	
f_T	Transition frequency at $f = 5MHz$	$I_C = 1A; V_{CE} = 12V$	25	-	MHz
C_c	Collector capacitance at $f = 1MHz$	$V_{CB} = 10V$	120	-	pF
t_{on}	On times	$I_C=3A, I_{B1}=-I_{B2}=0.3A, V_{CC}=60V$		1.0	us
t_s	Turn-off storage time	$I_C=3A, I_{B1}=-I_{B2}=0.3A, V_{CC}=60V$		2.5	us
t_f	Fall time	$I_C=3A, I_{B1}=-I_{B2}=0.3A, V_{CC}=60V$	0.4	1.0	us

This datasheet has been download from:

www.datasheetcatalog.com

Datasheets for electronics components.