



2SD1088

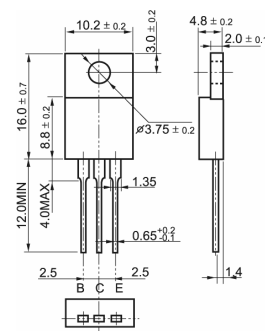
SILICON NPN TRIPLE DIFFUSED TRANSISTOR

GENERAL DESCRIPTION

High voltage switching application.
Igniter application.



TO-220



QUICK REFERENCE DATA

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V_{CEFSM}	Collector-emitter voltage peak value	$V_{BE} = 0V$	-	300	V
V_{CEO}	Collector-emitter voltage (open base)		-	250	V
I_C	Collector current (DC)		-	6	A
I_{CM}	Collector current peak value		-		A
P_{tot}	Total power dissipation	$T_{mb} \leq 25^\circ C$	-	30	W
V_{CEsat}	Collector-emitter saturation voltage		-		V
V_F	Diode forward voltage	$I_F = 4.5A$			V
t_f	Fall time	$I_{Csat} = 4.5A; f = 16KHz$		-	μs

LIMITING VALUES

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V_{CEFSM}	Collector-emitter voltage peak value	$V_{BE} = 0V$	-	300	V
V_{CEO}	Collector-emitter voltage (open base)		-	250	V
V_{FRO}	Emitter-base voltage (open collector)		-		V
I_C	Collector current (DC)		-	6	A
I_B	Base current (DC)		-	1	A
P_{tot}	Total power dissipation	$T_{mb} \leq 25^\circ C$	-	30	W
T_{stm}	Storage temperature		-55	150	$^\circ C$
T_j	Junction temperature		-	150	$^\circ C$

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
I_{CRO}	Collector-base cut-off current	$V_{CB} = 300V; V_E = 0$	-	0.5	mA
I_{FRO}	Emitter-base cut-off current	$V_{EB} = 5V, I_C = 0$	-	0.5	mA
$V_{(RR)CEO}$	Collector-emitter breakdown voltage	$I_C = 0.5A, L = 40mH$	250		V
V_{CEsat}	Collector-emitter saturation voltages	$I_C = 4A; I_B = 0.04A$	-	2.0	V
h_{FF1}	DC current gain	$I_C = 4A, V_{CE} = 2V$	200		
h_{FF2}	DC current gain	$I_C = 2A; V_{CE} = 2V$	2000	-	
C_c	Collector capacitance at $f = 1MHz$	$V_{CB} = 10V$		-	pF
t_{on}	On times			1	us
t_s	Turn-off storage time			8	us
t_f	Fall time			5	us