



2SD1088

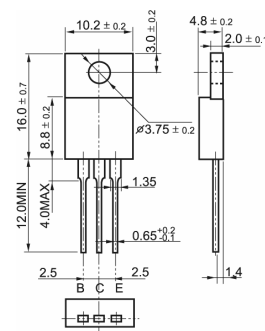
SILICON NPN TRIPLE DIFFUSED TRANSISTOR

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	$I_{Csat} = 4.5A; f = 16KHz$		-	$\mu s$

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