

2N6045

QUICK REFERENCE DATA

SYMBOL	PARAMETER	CONDITION	MIN	MAX	UNIT
V_{CESM}	Collector-emitter voltage peak value	$V_{BE}=0V$	100-		V
V_{CEO}	Collector-emitter voltage (open base)		100		V
I_C	Collector current (DC)		8.0-		A
I_{CM}	Collector current peak value		16		A
P_{TOT}	Total power dissipation	$T_{mb} \leq 25^\circ C$	75-		W
V_{CESat}	Collector -emitter saturation voltage	$I_C=8A$; $I_B=0.08A$		4.0	V
I_{Csat}	Collector saturation current				A
V_{BE}	Emitter forward voltage	$I_E=8A$			V
t_f	Fall time	$I_C=3.0A$; $I_{B1}=-I_{B2}=0.3A$; $V_{CC}=30V$			us

LIMITING VALUES

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V_{CESM}	Collector-emitter voltage peak value	$V_{BE}=0V$		100	V
V_{CEO}	Collector-emitter voltage (open base)			100	V
V_{EBO}	Emitter-base voltage (open collector)			5	V
I_C	Collector current (DC)			8	A
I_B	Base current(DC)			0.12	A
I_{BM}	Base current peak value				A
P_{TOT}	Total power dissipation	$T_{mb} \leq 25^\circ C$		75	W
T_{sig}	Storage temperature		-60	150	$^\circ C$
T_j	Junction temperature		-60	150	$^\circ C$

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITION	MIN	MAX	UNIT
I_{CBO}	Collector-base cut-off current	$V_{CB}=100V$		20	uA
I_{EBO}	Emitter-base cut-off current	$V_{EB}=5V$		2.0	mA
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=100mA$	100		V
V_{CESat1}	Collector-emitter saturation voltage	$I_C=3.0A, I_B=12mA$		2.0	V
V_{CESat2}	Collector-emitter saturation voltage	$I_C=8A, I_B=80mA$		4.0	V
h_{FE1}	DC current gain	$I_C=3A, V_{CE}=4V$	1000	20000	
h_{FE2}	DC current gain	$I_C=8A, V_{CE}=4V$	100		
f_T	Transition frequency at $f=1MHz$	$I_C=0.5A, V_{CE}=4V$			MHz
C_C	Collector capacitance at $f=1MHz$	$V_{CB}=10V$			pF
t_{ON}	On times	$I_C=3A, I_B=0.3A$, $V_{CC}=30V$			us
t_S	Turn-off storage time	$I_C=3A, I_B=0.3A$, $V_{CC}=30V$			us
t_F	Fall time	$I_C=3A, I_B=0.3A$, $V_{CC}=30V$			us

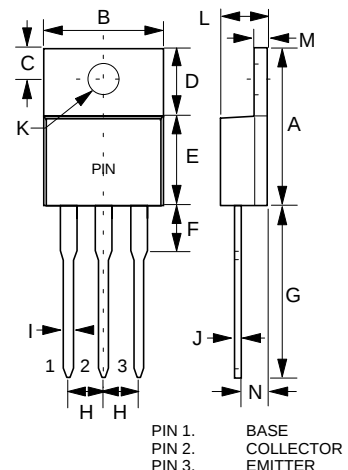
GENERAL DESCRIPTION

Silicon NPN medium power Darlington transistors in a plastic envelope, primarily for use in low-speed switching and general purpose.

NPN

Silicon Power Darlington Transistor

TO-220



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.100	.135	2.54	3.43	
D	.230	.270	5.84	6.86	
E	.380	.420	9.65	10.67	
F	-----	.250	-----	6.35	
G	.500	.580	12.70	14.73	
H	.090	.110	2.29	2.79	
I	.020	.045	0.51	1.14	
J	.012	.025	0.30	0.64	
K	.139	.161	3.53	4.09	Ø
L	.140	.190	3.56	4.83	
M	.045	.055	1.14	1.40	
N	.080	.115	2.03	2.92	