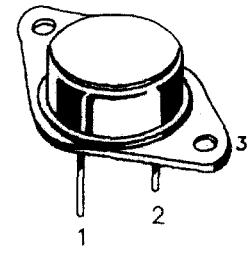
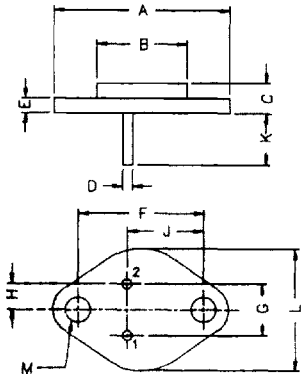
2SD350 NPN POWER TRANSISTOR

Horizontal Deflection Output Applications



PIN CONFIGURATION
1. BASE
2. EMITTER
3. COLLECTOR



ALL DIMENSIONS ARE IN M.M.

DIM	MIN	MAX
A	–	39,37
B	–	22,22
C	6,35	8,50
D	0,96	1.09
E	–	1,77
F	29,90	30,4
G	10,69	11,18
H	5,20	5,72
J	16,64	17,15
K	11,15	12,25
L	–	26,67
M	3,84	4,19

ABSOLUTE MAXIMUM RATINGS

Collector-base voltage (open emitter)	V_{CBO}	max.	1500 V
Collector-emitter voltage (open base)	V_{CEO}	max.	700 V
Collector current	I_C	max.	5 A
Total power dissipation up to $T_C = 90°C$	P_{tot}	max.	35 W
Junction temperature	T_j	max.	200 °C
Collector-emitter saturation voltage			
$I_C = 4.5A$; $I_B = 2A$	V_{CEsat}	max.	5 V
D.C. current gain			
$I_C = 4A$; $V_{CE} = 10V$	h_{FE}	min.	3.0
		max.	8.0

RATINGS (at T_A=25°C unless otherwise specified)

Limiting values			
Collector-base voltage (open emitter)	V_{CBO}	max.	1500 V
Collector-emitter voltage (open base)	V_{CEO}	max.	700 V
Collector-emitter voltage (V_{BE} = 0)	V_{CES}	max.	1500 V
Emitter-base voltage (open collector)	V_{EBO}	max.	5 V

Collector current	I_C	max.	5 A
Collector current (peak)	I_{CP}	max.	7 A
Emitter current	I_E	max.	7.0 A
Total power dissipation up to T_C = 90°C	P_{tot}	max.	35 W
Junction temperature	T_j	max.	200 °C
Storage temperature	T_{stg}	−65 to +200	°C

CHARACTERISTICS

T_{amb} = 25°C unless otherwise specified

Collector cut-off current			
I_E = 0; V_{CB} = 750V	I_{CBO}	max.	100 µA
I_E = 0; V_{CB} = 1500V	I_{CBO}	max.	1 mA
Breakdown voltages			
I_C = 1 mA; I_B = 0	V_{CEO}	min.	700 V
I_C = 1 mA; I_E = 0	V_{CBO}	min.	1500 V
I_E = 50 mA; I_C = 0	V_{EBO}	min.	5 V
Saturation voltages			
I_C = 4.5A; I_B = 2A	V_{CEsat}*	max.	5.0 V
	V_{BEsat}*	max.	1.6 V
D.C. current gain			
I_C = 4A; V_{CE} = 10V	h_{FE}*	min.	3.0
		max.	8.0

Switching time

I_C = 4A; $I_{B(end)}$ = 2.5A; L_B = 10µH			
Fall time	t_f	max.	1.0 µs
Storage time	t_s	typ.	13 µs

* Pulse test.