

2SD1326

Silicon NPN Triple-Diffused Planar Darlington Type

Medium Speed Power Switching

Features

- 60V Zener diode built-in between C and B
- Very small fluctuation in breakdown voltages
- Large energy handling capability
- High speed switching
- "Full Pack" package for simplified mounting on a heat sink with one screw

Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Value	Unit	
Collector-base voltage	V _{CB0}	60±10	V	
Collector-emitter voltage	V _{CE0}	60±10	V	
Emitter-base voltage	V _{EB0}	5	V	
Peak collector current	I _{CP}	8	A	
Collector current	I _C	4	A	
Collector power dissipation	P _C	T _c = 25 °C	40	W
		T _a = 25 °C	2	
Junction temperature	T _J	150	°C	
Storage temperature	T _{stg}	-55 ~ +150	°C	

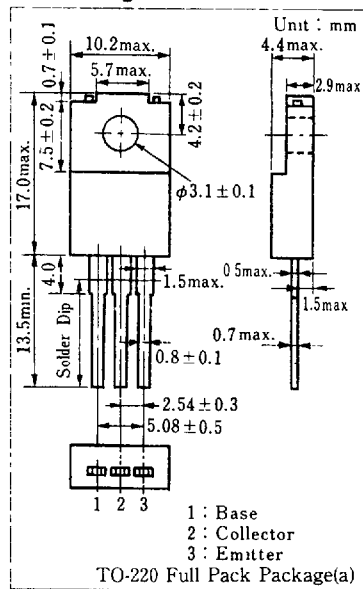
Electrical Characteristics (Tc=25°C)

Item	Symbol	Condition	min.	typ.	max.	Unit	
Collector cutoff current	I _{CS0}	V _{CB} = 50 V, I _E = 0			100	μA	
Emitter cutoff current	I _{EB0}	V _{EB} = 5 V, I _C = 0			2	mA	
Collector-emitter voltage	V _{CE0}	I _C = 5 mA, I _B = 0	50		70	V	
DC current gain	h _{FE1}	V _{CE} = 3 V, I _C = 0.5 A	1000				
	h _{FE2} *1	V _{CE} = 3 V, I _C = 3 A	1000		10000		
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = 3 A, I _B = 12 mA			2.5	V	
		I _C = 5 A, I _B = 20 mA			4		
Base-emitter saturation voltage	V _{BE(sat)}	I _C = 3 A, I _B = 12 mA			2.5	V	
Transition frequency	f _T	V _{CE} = 10V, I _C = 0.5A, f = 1MHz		20		MHz	
Turn-on time	t _{on}	I _C = 3A, I _{B1} = 12mA, I _{B2} = -12mA V _{CC} = 50V		0.3		μs	
Storage time	t _{stg}				3		μs
Fall time	t _f				1		μs
Energy handling capability	E _{s/b} *2	I _C = 2 A, L = 100 mH, R _{BE} = 100 Ω	50			mJ	

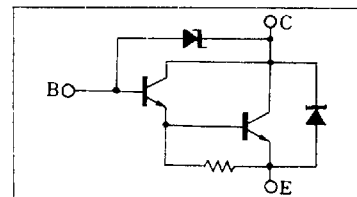
*1h_{FE2} Classifications

Class	R	Q	P
h _{FE2}	1000~2500	2000~5000	4000~10000

Package Dimensions



Inner Circuit



*2E_s Test method

