

2SD1632

Silicon NPN Triple-Diffused Junction Mesa Type

Horizontal Deflection Output

■ Features

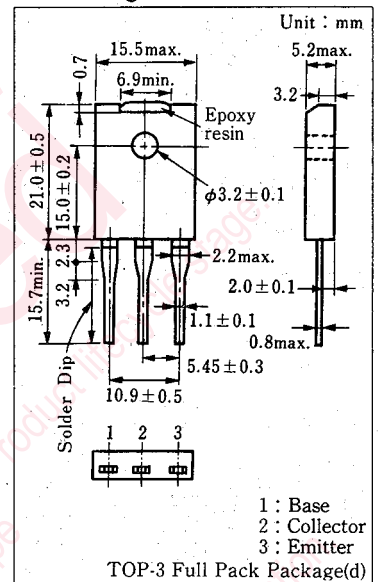
- Damper diode built-in
- High breakdown voltage and high reliability by glass passivation
- High speed switching
- Wide area of safety operation (ASO)
- "Full Pack" package for simplified mounting on a heat sink with one screw

■ Absolute Maximum Ratings (T_c=25°C)

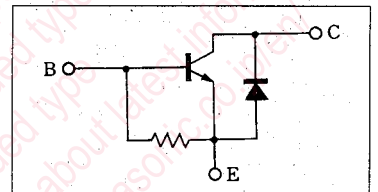
Item	Symbol	Value	Unit
Collector-base voltage	V _{CB0}	1500	V
Collector-emitter voltage	V _{CES}	1500	V
Emitter-base voltage	V _{EBO}	5	V
Collector current	I _C	4	A
Peak collector current	I _{CP} *	15	A
Peak base current	I _{BP}	3.5	A
Reverse peak base current	I _{BP}	-2.5	A
Collector power dissipation	T _c =25°C	70	W
	T _a =25°C	3	
Junction temperature	T _j	130	°C
Storage temperature	T _{stg}	-55 ~ +130	°C

* Non-repetitive peak value

■ Package Dimensions



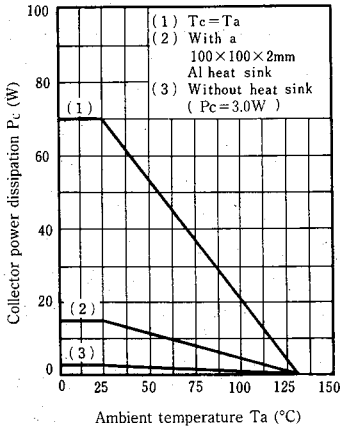
■ Inner Circuit



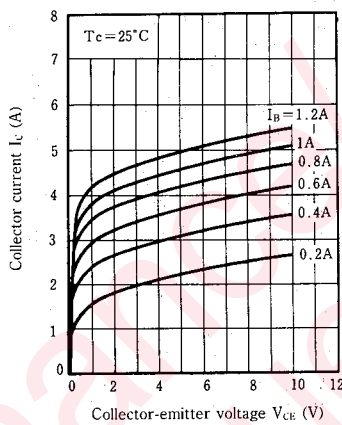
■ Electrical Characteristics (T_c=25°C)

Item	Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	I _{CB0}	V _{CB} =750 V, I _E ≐ 0			50	μA
		V _{CB} =1500 V, I _E =0			1	mA
Emitter-base voltage	V _{EBO}	I _E =500 mA, I _C =0	5			
DC current gain	h _{FE}	V _{CE} =10 V, I _C =3 A	5		15	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =3 A, I _B =1 A			1	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =3 A, I _B =1 A			1.5	V
Transition frequency	f _T	V _{CE} =10V, I _C =1A, f=0.5MHz		2		MHz
Fall time	t _f	I _C =3A, I _{Bend} =1A			0.75	μs
Storage time	t _{stg}	L _{leak} =5μH	4		9	μs
Diode forward voltage	V _F	I _C =-4A, I _B =0			-2.2	V

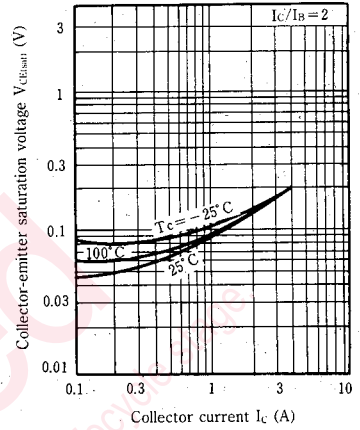
$P_C - T_a$



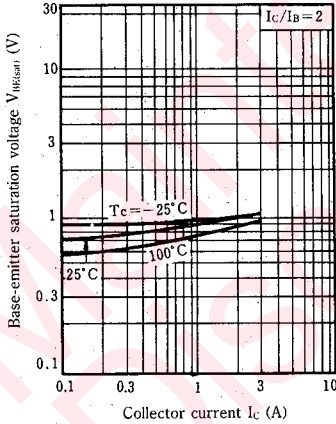
$I_C - V_{CE}$



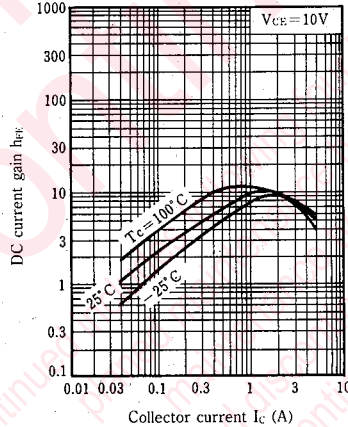
$V_{CE(sat)} - I_C$



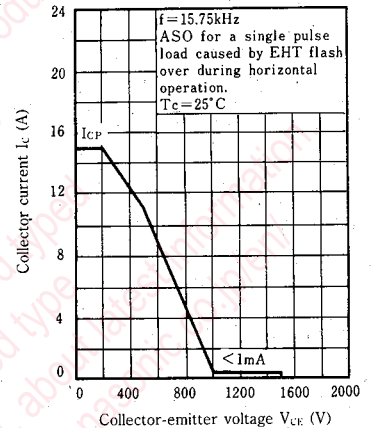
$V_{BE(sat)} - I_C$



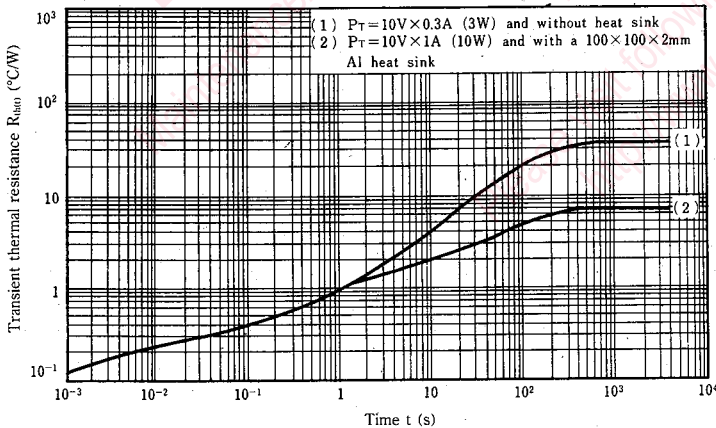
$h_{FE} - I_C$



Area of safe operation (ASO)



$R_{th}(t) - t$



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