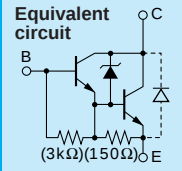


**Built-in Avalanche Diode
for Surge Absorbing
Darlington**

2SD1796



Silicon NPN Triple Diffused Planar Transistor

Application : Driver for Solenoid, Relay and Motor and General Purpose

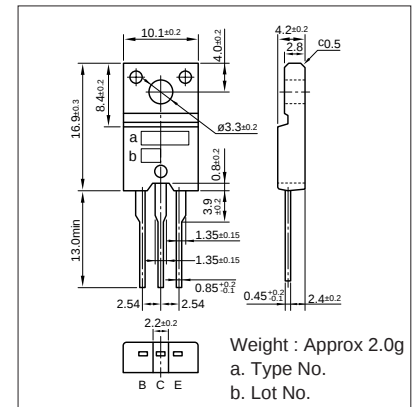
Absolute maximum ratings (Ta=25°C)

Symbol	2SD1796	Unit
VCBO	60±10	V
VCEO	60±10	V
VEBO	6	V
IC	4	A
IB	0.5	A
Pc	25(Tc=25°C)	W
Tj	150	°C
Tstg	-55 to +150	°C

Electrical Characteristics (Ta=25°C)

Symbol	Conditions	2SD1796	Unit
ICBO	VCB=50V	10max	μA
IEBO	VEB=6V	10max	mA
V(BR)CEO	IC=10mA	60±10	V
hFE	VCE=4V, IC=3A	2000min	
VCE(sat)	IC=3A, IB=10mA	1.5max	V
fT	VCE=12V, IE=-0.2A	60typ	MHz
COB	VCB=10V, f=1MHz	45 typ	pF

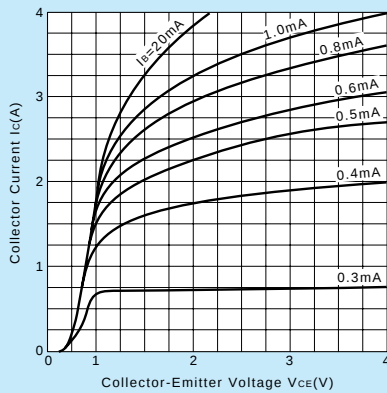
External Dimensions FM20(TO220F)



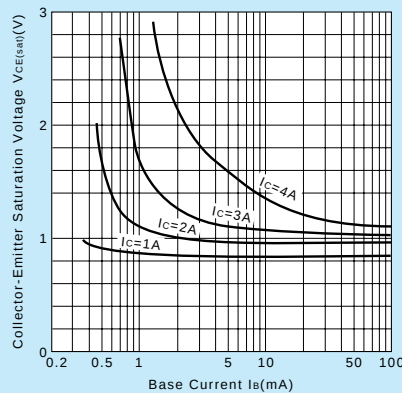
Typical Switching Characteristics (Common Emitter)

VCC (V)	RL (Ω)	IC (A)	VBB1 (V)	VBB2 (V)	IB1 (mA)	IB2 (mA)	ton (μs)	tstg (μs)	tf (μs)
30	10	3	10	-5	10	-10	1.0typ	4.0typ	1.5typ

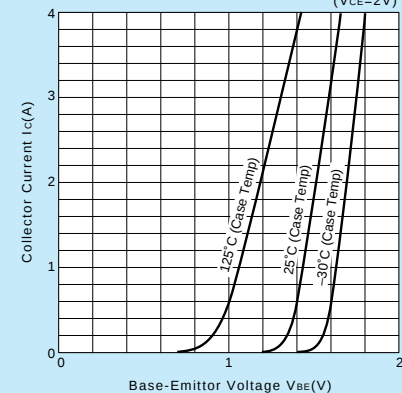
IC-VCE Characteristics (Typical)



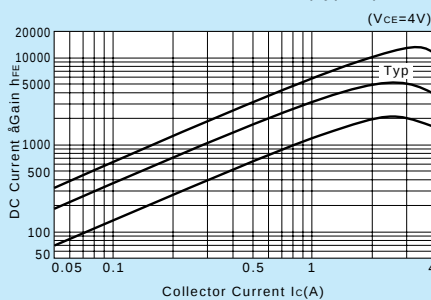
VCE(sat)-IB Characteristics (Typical)



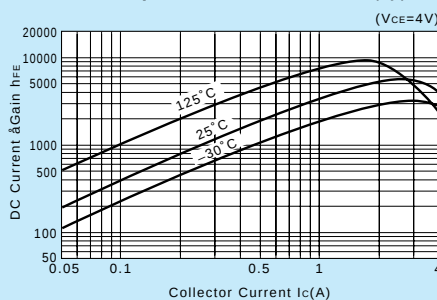
IC-VBE Temperature Characteristics (Typical)



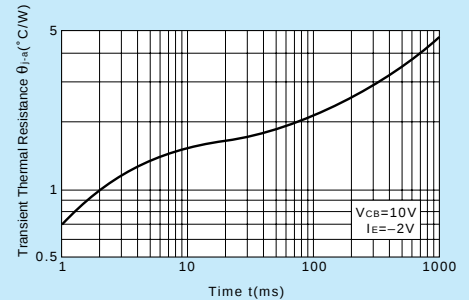
hFE-IC Characteristics (Typical)



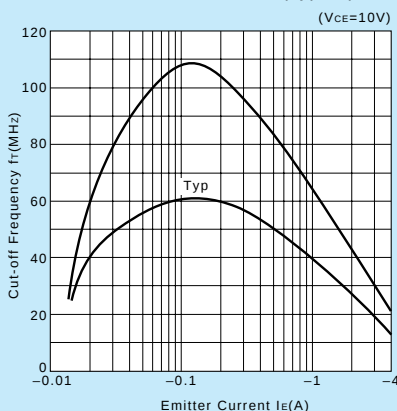
hFE-IC Temperature Characteristics (Typical)



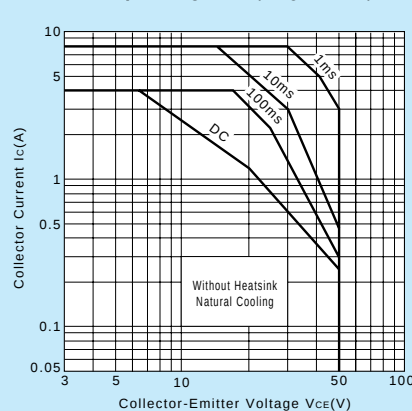
θJA-t Characteristics



fT-IE Characteristics (Typical)



Safe Operating Area (Single Pulse)



Pc-Ta Derating

