2SC4020

Silicon NPN Triple Diffused Planar Transistor (High Voltage Switching Transistor)

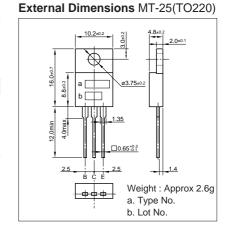
Application: Switching Regulator and General Purpose

Absolute maximum ratings (Ta=25°C)							
Symbol	2SC4020	Unit					
Vсво	900	V					
VCEO	800	V					
VEBO	7	V					
Ic	3(Pulse6)	А					
Ів	1.5	А					
Pc	50(Tc=25°C)	W					
Tj	150	°C					

-55 to +150

Tstg

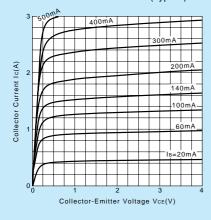
naracteristics	(Ta=25°C)			
Conditions	2SC4020	Unit		
Vcb=800V	100max	μΑ		
VEB=7V	100max	μΑ		
Ic=10mA	800min	V		
Vce=4V, Ic=0.7A	10 to 30			
Ic=0.7A, IB=0.14A	0.5max	V		
Ic=0.7A, IB=0.14A	1.2max	V		
Vce=12V, Ie=-0.3A	6typ	MHz		
VcB=10V, f=1MHz	40typ	рF		
	Conditions VCB=800V VEB=7V IC=10mA VCE=4V, IC=0.7A IC=0.7A, IB=0.14A IC=0.7A, IB=0.14A VCE=12V, IE=-0.3A	Conditions 2SC4020 VcB=800V 100max VEB=7V 100max Ic=10mA 800min VcE=4V, Ic=0.7A 10 to 30 Ic=0.7A, IB=0.14A 0.5max Ic=0.7A, IB=0.14A 1.2max VcE=12V, IE=-0.3A 6typ		



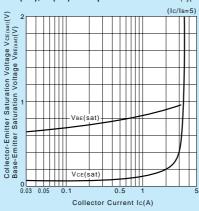
Typical Switching Characteristics (Common Emitter)

					,				
Vcc (V)	R _L (Ω)	Ic (A)	V _{BB1} (V)	V _{BB2} (V)	I _{B1} (A)	IB2 (A)	ton (µs)	tstg (µs)	tf (µs)
250	357	0.7	10	-5	0.1	-0.35	1max	5max	1max

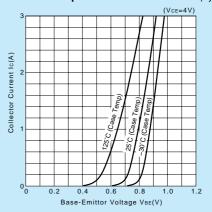




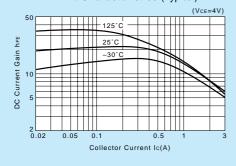
VcE(sat), VBE(sat)-Ic Temperature Characteristics (Typical)



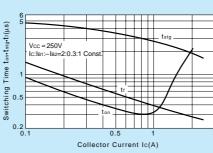
Ic-VBE Temperature Characteristics (Typical)

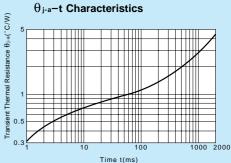


hfe-Ic Characteristics (Typical)

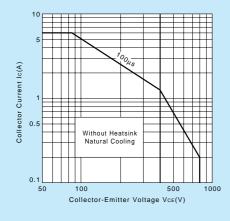


ton•tstg•tf-Ic Characteristics (Typical)

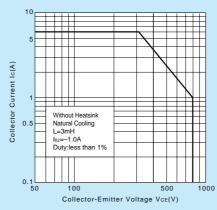




Safe Operating Area (Single Pulse)



Reverse Bias Safe Operating Area



Pc-Ta Derating

