

NPN Transistors

2SC3360-HF

■ Features

- High voltage $V_{CE0}=200V$
- High DC Current Gain $h_{FE}=90$ to 450
- Complementary to 2SA1330-HF
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish

■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	200	V
Collector - Emitter Voltage	V_{CE0}	200	
Emitter - Base Voltage	V_{EB0}	5	
Collector Current - Continuous	I_c	100	mA
Collector Power Dissipation	P_c	200	mW
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55 to 150	

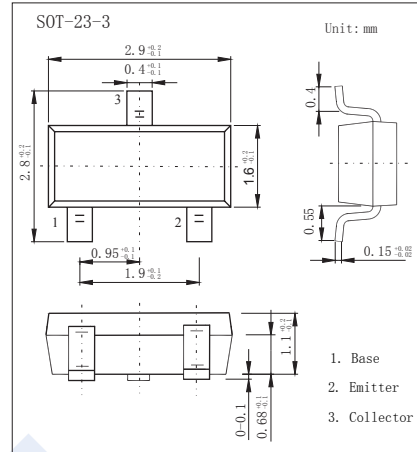
■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_c = 100 \mu A, I_E = 0$	200			V
Collector- emitter breakdown voltage	V_{CE0}	$I_c = 1 mA, R_{BE} = \infty$	200			
Emitter - base breakdown voltage	V_{EB0}	$I_E = 100 \mu A, I_c = 0$	5			
Collector- base cut-off current	I_{CB0}	$V_{CB} = 200 V, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = 5V, I_c = 0$			0.1	
Collector-emitter saturation voltage *1	$V_{CE(sat)}$	$I_c = 50mA, I_B = 5mA$		0.1	0.3	V
Base - emitter saturation voltage *1	$V_{BE(sat)}$	$I_c = 50mA, I_B = 5mA$		0.8	1.2	
Base - emitter voltage *1	V_{BE}	$V_{CE} = 10V, I_c = 10mA$				
DC current gain *1	h_{FE}	$V_{CE} = 10V, I_c = 10mA$	90	200	450	
		$V_{CE} = 10V, I_c = 50mA$	50	200		
Turn-ON Time	t_{on}	$I_c = 10mA, I_{B1} = -I_{B2} = 1mA, V_{CC} = 10V, V_{BE(off)} = -2.5V$		0.15		μs
Storage Time	t_{stg}			1.3		
Fall Time	t_f			1.6		
Collector output capacitance	C_{ob}	$V_{CB} = 30V, I_E = 0, f = 1MHz$		2.8		pF
Transition frequency	f_T	$V_{CE} = 10V, I_c = 10mA$		160		MHz

*1.pulsed: $PW \leq 350\mu s, Duty\ Cycle \leq 2\%$

■ Classification of $h_{FE}(1)$

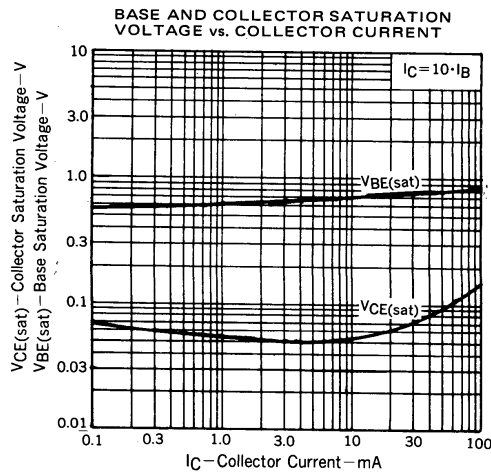
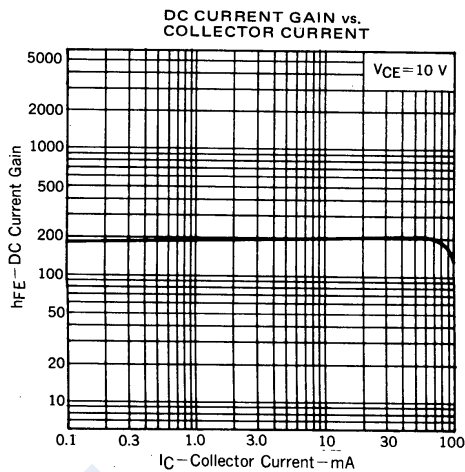
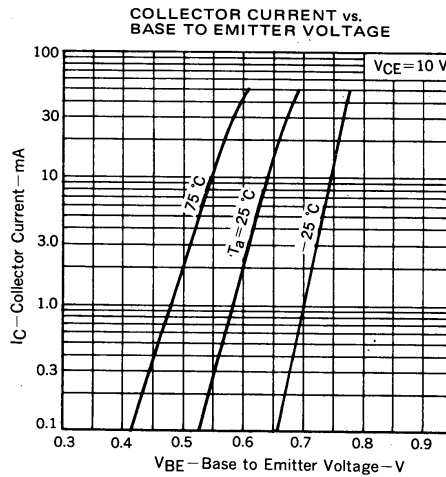
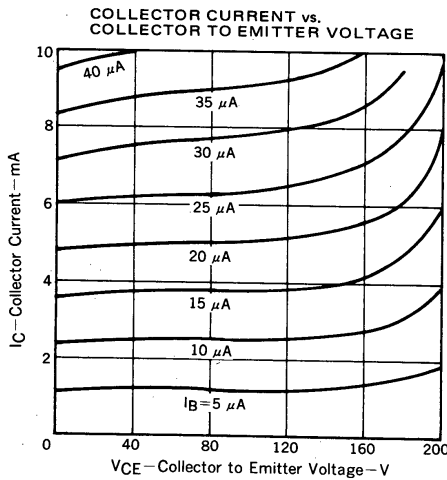
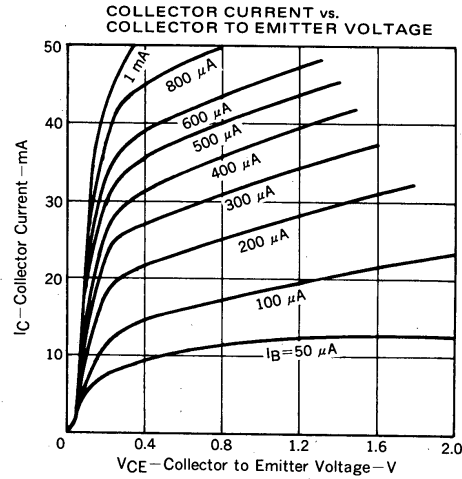
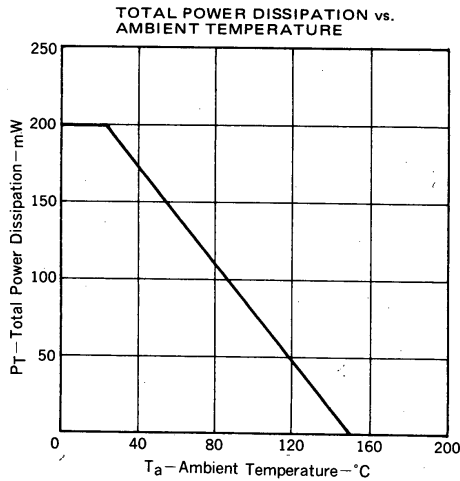
Type	2SC3360-N15-HF	2SC3360-N16-HF	2SC3360-N17-HF
Range	90-180	135-270	200-450
Marking	N15 F	N16 F	N17 F



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Typical Characteristics



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■ Typical Characteristics

