

Epoxy meets UL-94 V-0 flammability rating
 Halogen free available upon request by adding suffix "HF"
 Moisture Sensitivity Level 1
 High-speed switching

: SOT-89
 Molding compound meets UL 94 V-0 flammability rating,
 RoHS-compliant, halogen-free
 Tin plated leads, solderable per
 J-STD-002 and JESD22-B102
 Marking: 1A

($T_a=25$ unless otherwise noted)

Minimum Collector-Emitter Voltage	V_{CE0}	V	$I_C=1mA, I_B=0$	40
Minimum Collector-Base Voltage	V_{CBO}	V	$I_C=10uA, I_E=0$	60
Minimum Emitter-Base Voltage	V_{EBO}	V	$I_E=10uA, I_C=0$	6
Collector Current	I_C	mA		200
Collector Power Dissipation	P_C	mW		500
Thermal Resistance From Junction To Ambient	R_{JA}	/W		250
Operation Junction Temperature	T_j			-55 to +150
Storage Temperature	T_{stg}			-55 to +150



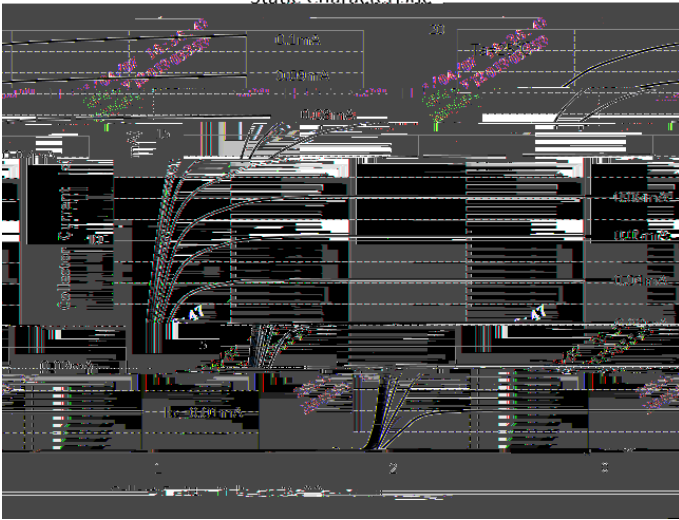
(Ta=25 unless otherwise noted)

Collector-Emitter Voltage	V_{CE0}	V	$I_C=1mA, I_B=0$	40		
Collector-Base Voltage	V_{CBO}	V	$I_C=10\mu A, I_E=0$	60		
Emitter-Base Voltage	V_{EBO}	V	$I_E=10\mu A, I_C=0$	6		
Collector-Base cut-off current	I_{CBO}	nA	$V_{CB}=30V$			50
Emitter-Base cut-off current	I_{EBO}	nA	$V_{EB}=6V$			50
DC Current Gain	h_{FE1}		$I_C=0.1mA, V_{CE}=1V$	60		
	h_{FE2}		$I_C=1mA, V_{CE}=1V$	80		
	h_{FE3}		$I_C=10mA, V_{CE}=1V$	100		300
	h_{FE4}		$I_C=50mA, V_{CE}=1V$	60		
	h_{FE5}		$I_C=100mA, V_{CE}=1V$	30		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	V	$I_C=10mA, I_B=1mA$			0.2
			$I_C=50mA, I_B=5mA$			0.3
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	V	$I_C=10mA, I_B=1mA$	0.65		0.85
			$I_C=50mA, I_B=5mA$			0.95
Transition Frequency	f_T	MHz	$I_C=10mA, V_{CE}=20V, f=100MHz$	300		
Output Capacitance	C_{obo}	pF	$V_{CB}=5.0V, f=1MHz, I_E=0$			4
Input Capacitance	C_{ibo}	pF	$V_{EB}=0.5V, f=1MHz, I_C=0$			8
Noise Figure	NF	dB				

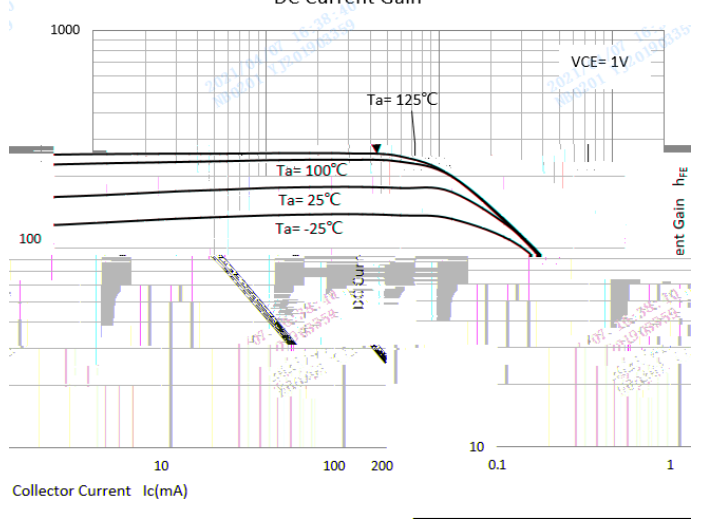


(Typical)

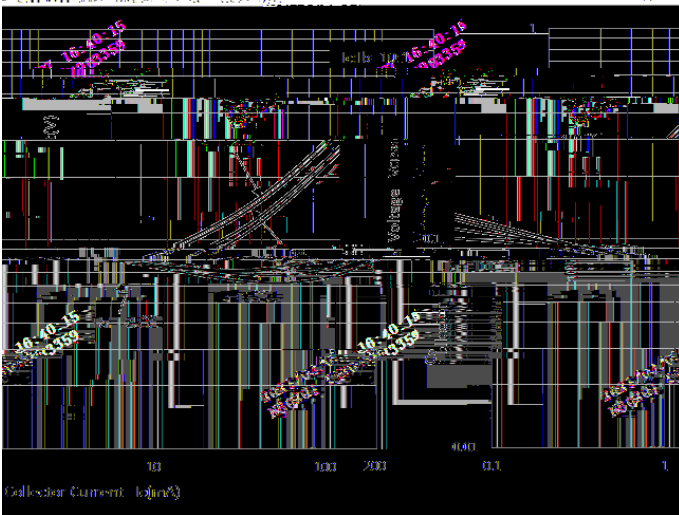
Static Characteristic



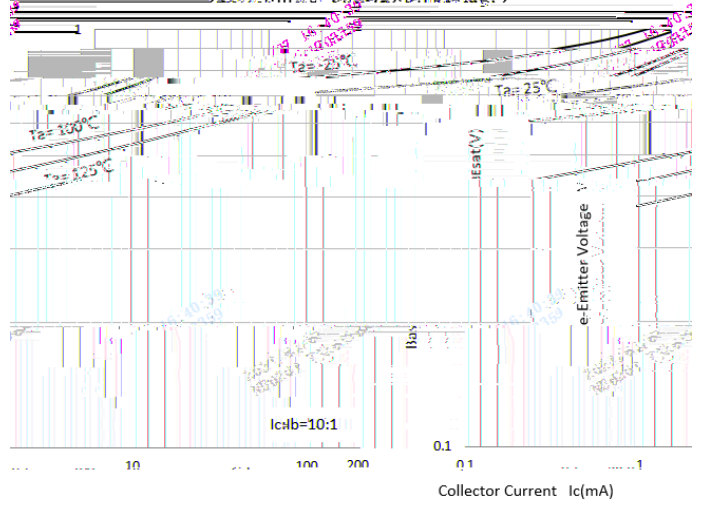
DC Current Gain



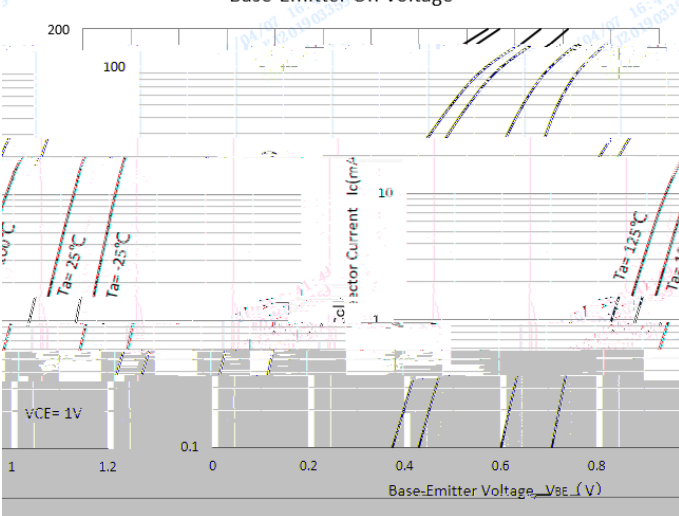
Collector-Emitter Saturation Voltage



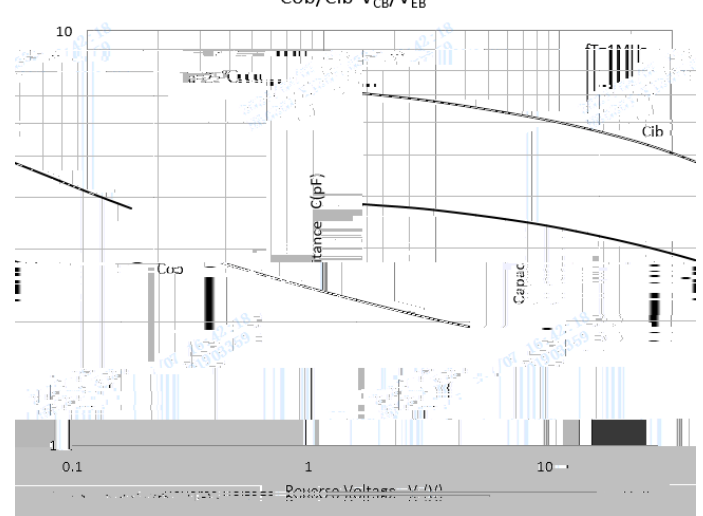
Base-Emitter Saturation Voltage



Base-Emitter On Voltage



$C_{ob}/C_{ib}-V_{CB}/V_{EB}$





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