

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



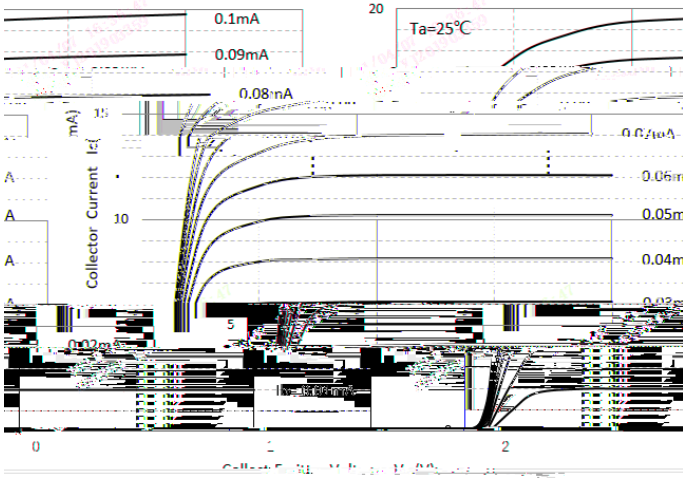
(Ta=25 unless otherwise noted)

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				

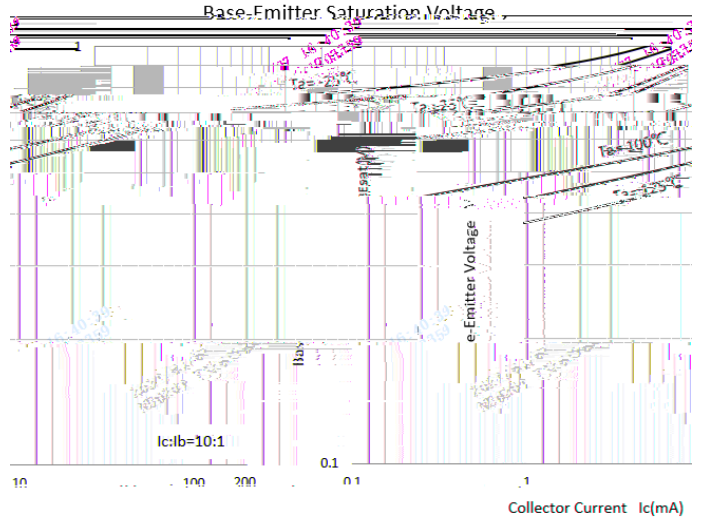
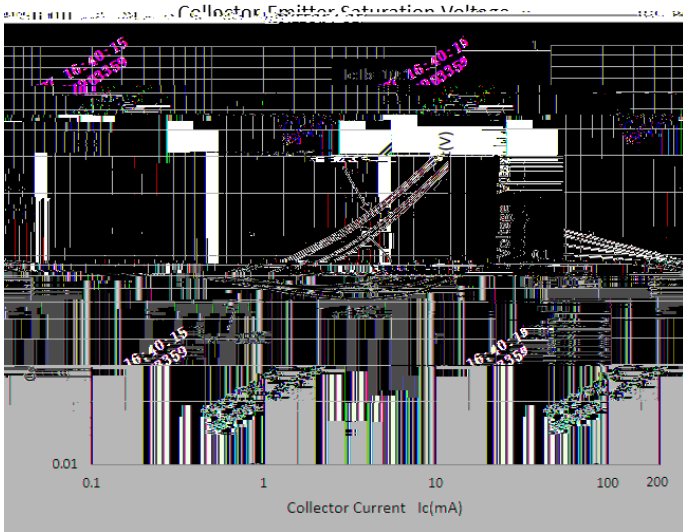
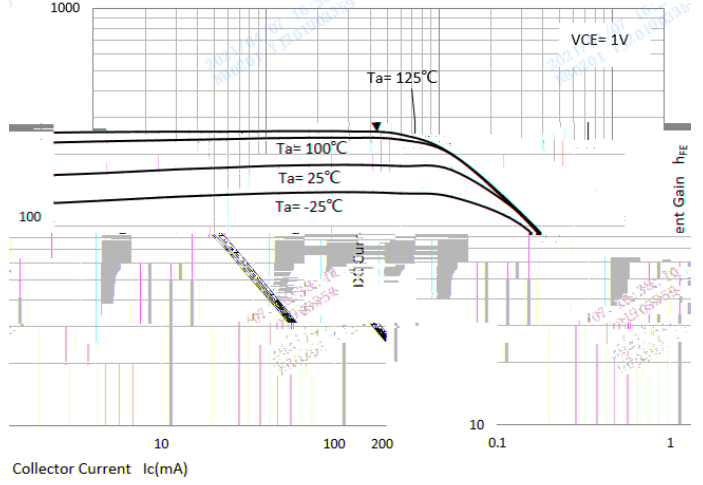


(Typical)

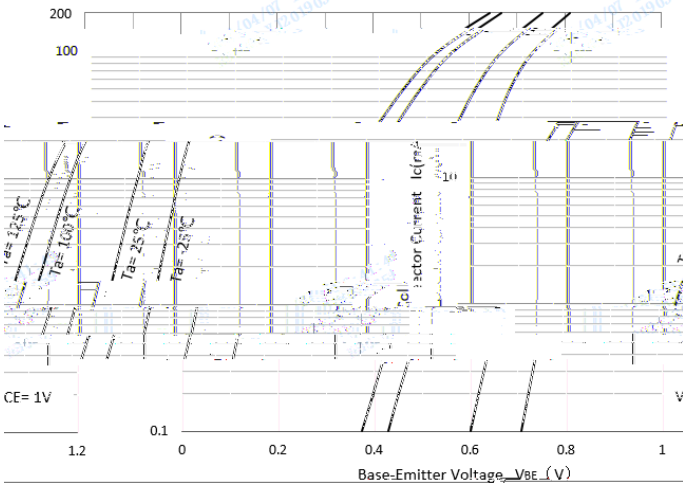
Static Characteristic



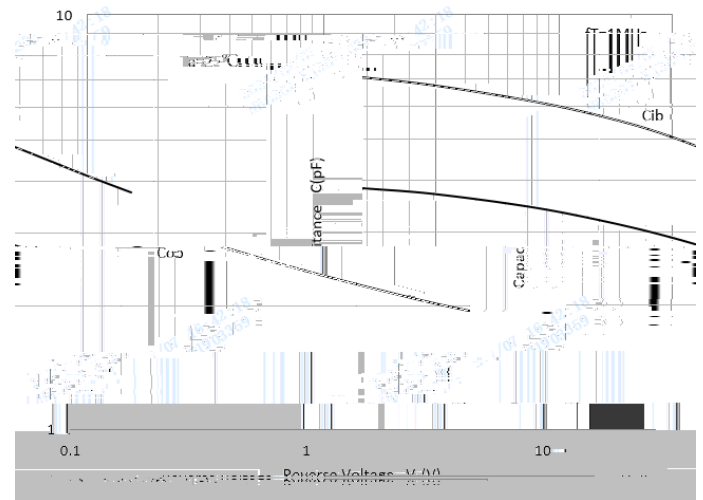
DC Current Gain

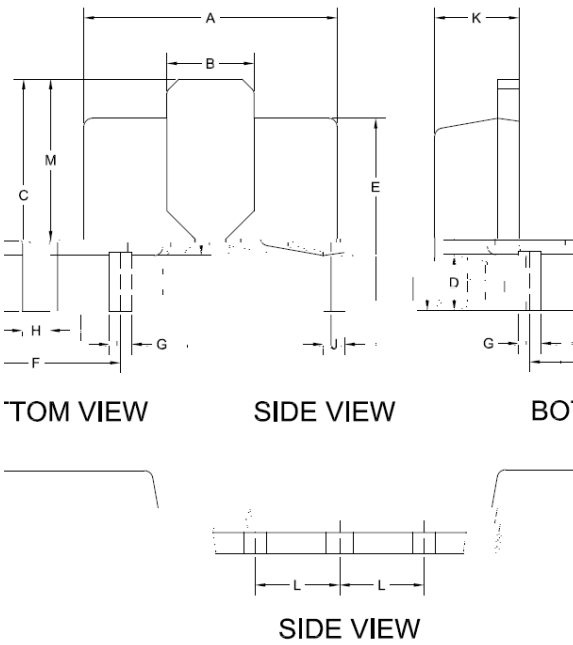
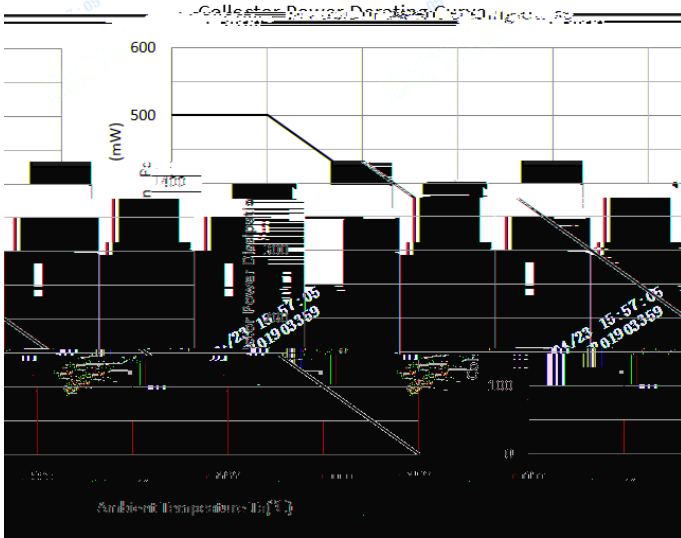


Base-Emitter On Voltage



Cob/Cib-V_{CB}/V_{EB}





DIM	INCHES		MM	
	MIN.	MAX.	MIN.	MAX.
A	0.173	0.181	4.400	4.600
B	0.061 TYP.		1.550 TYP.	
C	0.155	0.167	3.940	4.240
D	0.094	0.107	2.400	2.600
E	0.118 TYP.		3.00 TYP.	
F	0.014	0.019	0.360	0.480
G	0.017	0.022	0.440	0.560
H	0.014	0.021	0.360	0.530
J	0.055	0.063	1.400	1.600
K	0.059 TYP.		1.500 TYP.	
L	0.108 TYP.		2.750 TYP.	
M				



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