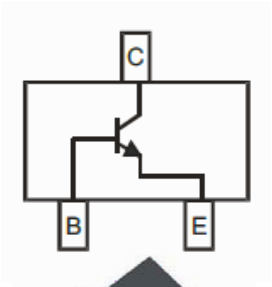
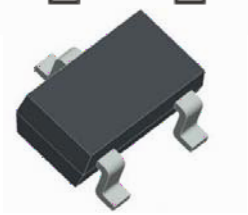
RoHS
COMPLIANT





- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- Ultra-Small Surface Mount Package
- Part no. with suffix “Q” means AEC-Q101 qualified

- Ideal for Amplification and Switching

- Case: SOT-323
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Marking 1GM

■ (Ta=25 unless otherwise noted)

Collector-Base Voltage	V_{CBO}	80	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	4	V
Collector Current	I_C	500	mA
Collector Power Dissipation (*)	P_C	200	mW
Thermal Resistance From Junction to Ambient (*)	$R_{\theta JA}$	625	K/W
Operation Junction Temperature	T_j	-55 to +150	
Storage Temperature	T_{stg}	-55 to +150	

(*) Device mounted on FR-4 PCB 1.0 x 1.0 x 0.06 inch

■ T_a=25 Unless otherwise specified

Collector-base breakdown voltage	V_{CBO}	V	I_C=100μA, I_E=0	80	
Collector-emitter breakdown voltage	V_{CEO}	V	I_C=1mA, I_B=0	80	
Emitter-base breakdown voltage	V_{EBO}	V	I_E=100μA, I_C=0	4	
Collector-base cut-off current	I_{CBO}	nA	V_{CB}=80V, I_E=0		100
Collector-emitter cut-off current	I_{CEO}	nA	V_{CE}=60V, I_B=0		100
Emitter-base cut-off current	I_{EBO}	nA	V_{EB}=3V, I_C=0		100
DC current gain	h_{FE}		V_{CE}=1V, I_C=10mA	100	400
	h_{FE}		V_{CE}=1V, I_C=100mA	100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	V	I_C=100mA, I_B=10mA		0.25
Base-emitter saturation voltage	$V_{BE(sat)}$	V	I_C=100mA, I_B=10mA		1.2

■ T_a=25 Unless otherwise specified

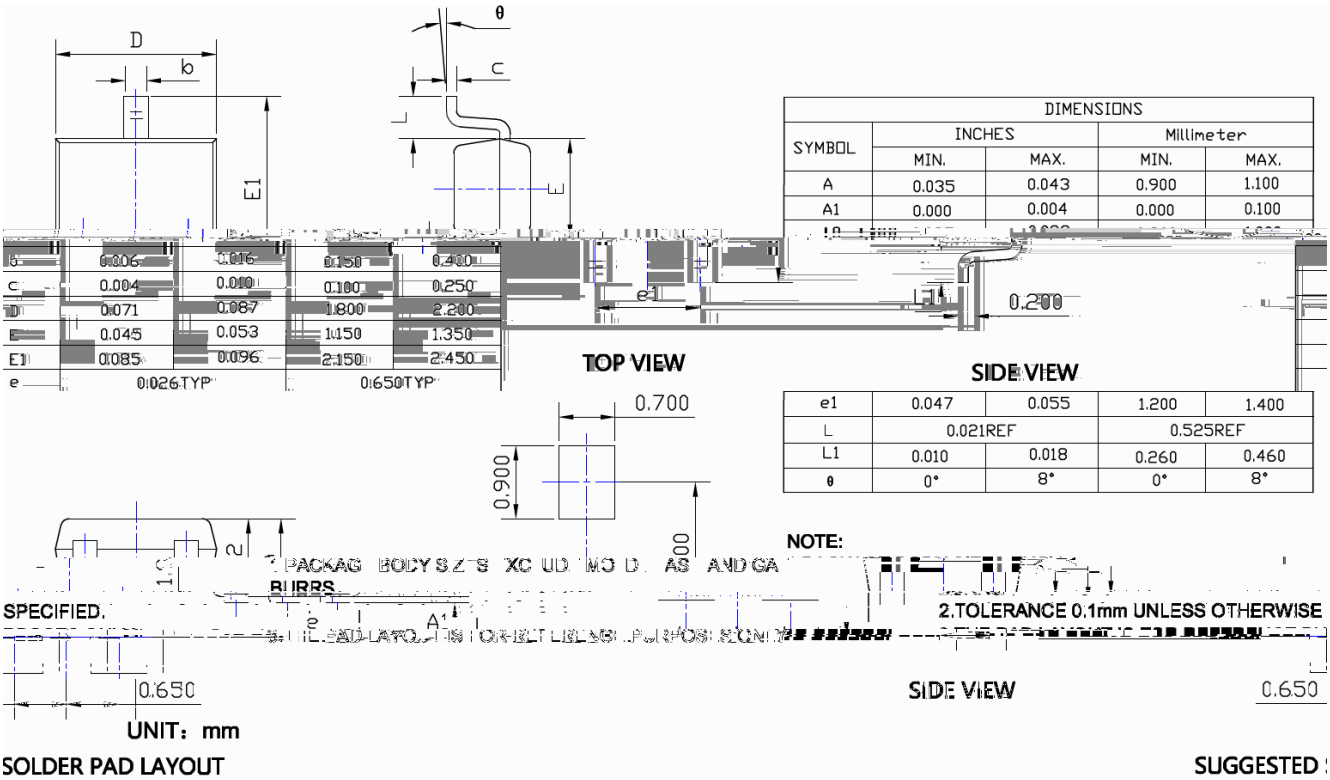
Transition frequency	f_T	MHz	V_{CE}=2V,I_C=10mA,f=100MHz	100	

■ (Example)

MMSTA06Q	F2	Approximate 0.006	3000	30000	120000	7” reel

(Typical)

■



DIMENSIONS				
SYMBOL	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.035	0.043	0.900	1.100
A1	0.000	0.004	0.000	0.100
b	0.006	0.016	0.150	0.400
c	0.004	0.010	0.100	0.250
D	0.071	0.087	1.800	2.200
E	0.045	0.053	1.150	1.350
E1	0.085	0.096	2.150	2.450
e	0.026TYP		0.650TYP	
e1	0.047	0.055	1.200	1.400
L	0.021REF		0.525REF	
L1	0.010	0.018	0.260	0.460
θ	0°	8°	0°	8°

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