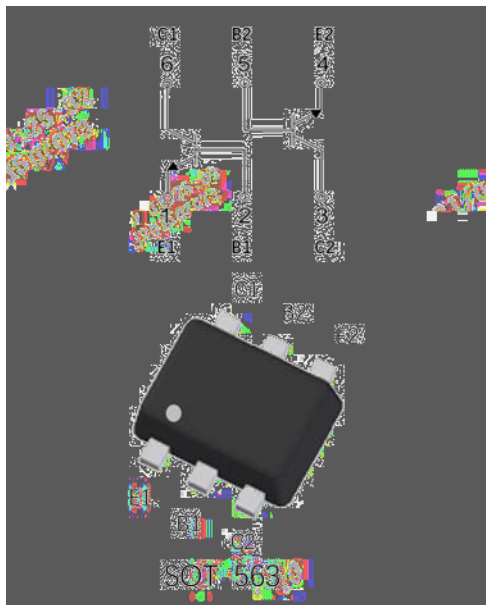




Dual NPN Small Signal Transistor



Features

- Moisture sensitivity level 1
- Halogen free and RoHS compliant
- Surface mount package ideally suited for automatic Insertion

Application

- Signal amplification
- Switching circuit

Mechanical data

Package SOT-563

Terminals Tin plated leads, solderable per J-STD-002 and JESD22-B102

■ Maximum Ratings ($T_a=25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Conditions	Value
Device marking code				X1
Collector-base voltage	V_{CBO}	V	$I_C=50\mu\text{A}, I_E=0$	60
Collector-emitter voltage	V_{CEO}	V	$I_C=1\text{mA}, I_B=0$	50
Emitter-base voltage	V_{EBO}	V	$I_E=50\mu\text{A}, I_C=0$	7
Collector current	I_C	mA		150
Power dissipation	P_D	mW		150
Junction temperature	T_J			-55 to +150
Storage temperature	T_{STG}			-55 to +150



EMX1



Item	Symbol	Unit	Conditions	Min	Typ	Max
Collector-base breakdown voltage	$V_{(BR)CBO}$	V	$I_C=50\mu A, I_E=0$	60		
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	V	$I_C=1mA, I_B=0$	50		
Emitter-base breakdown voltage	$V_{(BR)EBO}$	V	$I_E=50\mu A, I_C=0$	7		
Collector cut-off current	I_{CBO}	nA	$V_{CB}=60V, I_B=0$			100
Emitter-base cutoff current	I_{EBO}	nA	$V_{EB}=7V, I_C=0$			100
DC current gain	h_{FE}		$V_{CE}=6V, I_C=1mA$	120		560

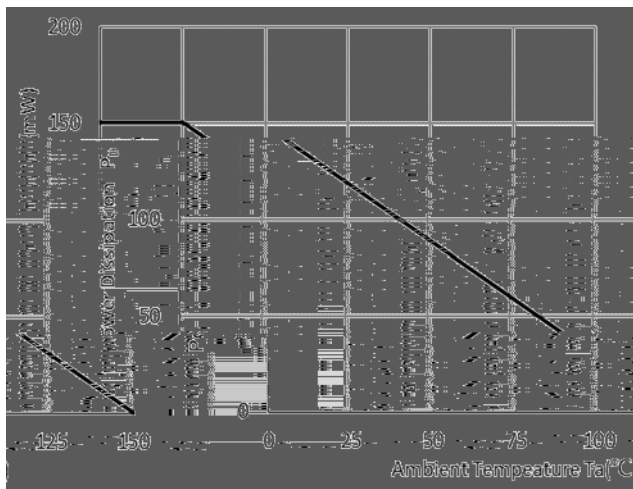


EMX1

RoHS
COMPLIANT



Fig 7 Pb-Ta Curve





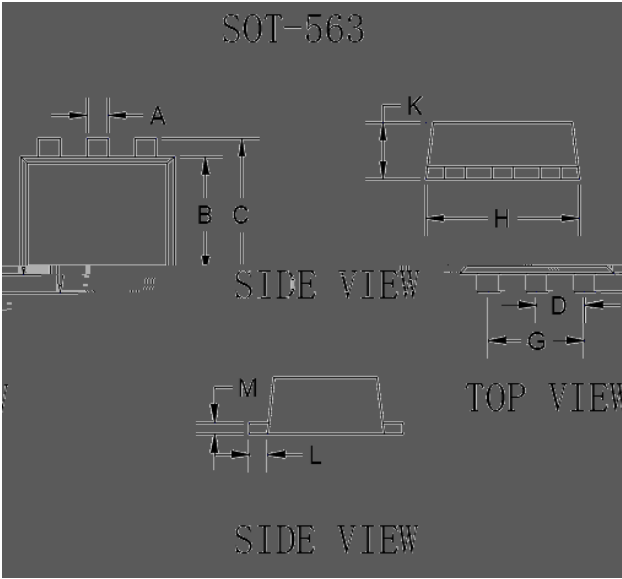
EMX1



■ Ordering Information

Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
EMX1	F2	Approximate 0.0035	3000	30000	120000	7" reel

■ Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.005	0.011	0.150	0.300
B	0.043	0.051	1.100	1.300
C	0.059	0.067	1.500	1.700
D	0.016	0.024	0.400	0.600
E	0.005	0.007	0.125	0.175
F	0.005	0.007	0.125	0.175
G	0.005	0.007	0.125	0.175
H	0.005	0.007	0.125	0.175
I	0.005	0.007	0.125	0.175
J	0.005	0.007	0.125	0.175
K	0.005	0.007	0.125	0.175
L	0.005	0.007	0.125	0.175
M	0.005	0.007	0.125	0.175
N	0.005	0.007	0.125	0.175
O	0.005	0.007	0.125	0.175
P	0.005	0.007	0.125	0.175
Q	0.005	0.007	0.125	0.175
R	0.005	0.007	0.125	0.175
S	0.005	0.007	0.125	0.175
T	0.005	0.007	0.125	0.175
U	0.005	0.007	0.125	0.175
V	0.005	0.007	0.125	0.175
W	0.005	0.007	0.125	0.175
X	0.005	0.007	0.125	0.175
Y	0.005	0.007	0.125	0.175
Z	0.005	0.007	0.125	0.175

■ Suggested Pad Layout

