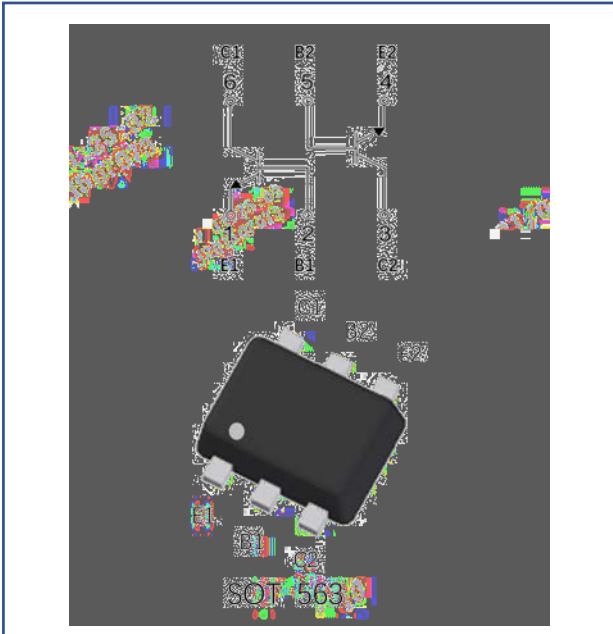




## Dual NPN Small Signal Transistor



### 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 ( $T_a=25$ Unless otherwise specified)

Item	Symbol	Unit	Conditions	Value
Device marking code				X1
Collector-base voltage	$V_{CB0}$	V	$I_C=50\mu A, I_E=0$	60
Collector-emitter voltage	$V_{CE0}$	V	$I_C=1mA, I_B=0$	50
Emitter-base voltage	$V_{EB0}$	V	$I_E=50\mu A, I_C=0$	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

RoHS

COMPLIANT

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

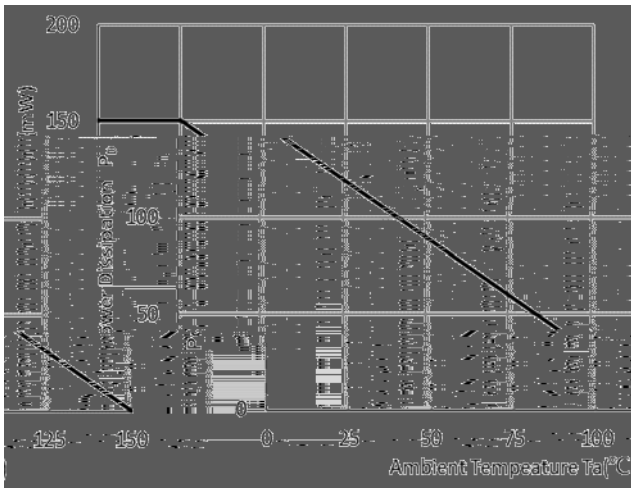


# EMX1

RoHS  
COMPLIANT



Fig 7 Pd-Ta Curve





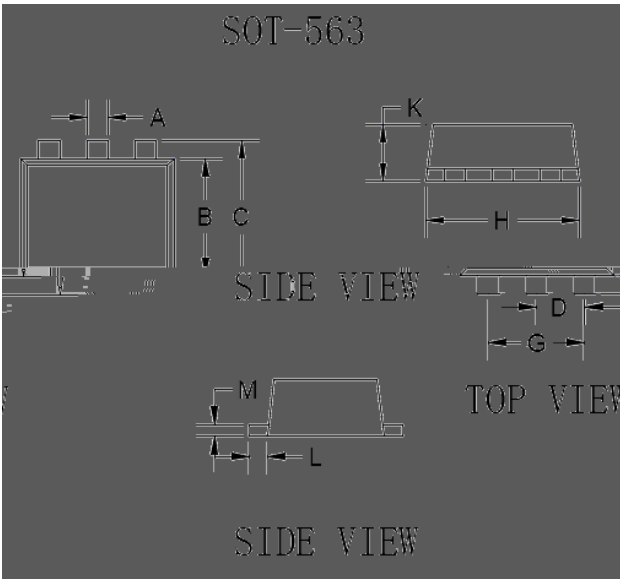
# EMX1

RoHS  
COMPLIANT

## 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



DIM	DIMENSIONS			
	INCHES		MMI	
	MINI	MAX	MINI	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	0.007	0.007	0.170	0.170
F	0.007	0.007	0.170	0.170
G	0.007	0.007	0.170	0.170
H	0.007	0.007	0.170	0.170
I	0.007	0.007	0.170	0.170
J	0.007	0.007	0.170	0.170
K	0.007	0.007	0.170	0.170
L	0.007	0.007	0.170	0.170
M	0.007	0.007	0.170	0.170
N	0.007	0.007	0.170	0.170
O	0.007	0.007	0.170	0.170
P	0.007	0.007	0.170	0.170
Q	0.007	0.007	0.170	0.170
R	0.007	0.007	0.170	0.170
S	0.007	0.007	0.170	0.170
T	0.007	0.007	0.170	0.170
U	0.007	0.007	0.170	0.170
V	0.007	0.007	0.170	0.170
W	0.007	0.007	0.170	0.170
X	0.007	0.007	0.170	0.170
Y	0.007	0.007	0.170	0.170
Z	0.007	0.007	0.170	0.170

## Suggested Pad Layout

