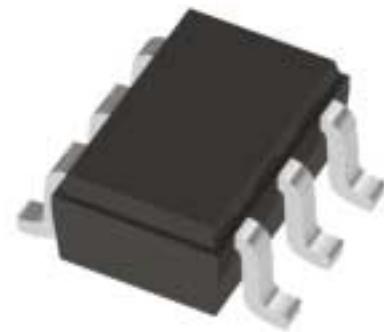


## FEATURES

- Small size and low-cost SC-70 / SOT363 package
- High Input P0.1dB: 29 dBm
- Low Insertion Loss: 0.35 dB at 2.4 GHz
- High Isolation: 26 dB Typ. at 2.4 GHz
- GaAs PHEMT technology
- Single supply voltage operation



## APPLICATIONS

- 802.11b,g Wireless LAN T/R switching

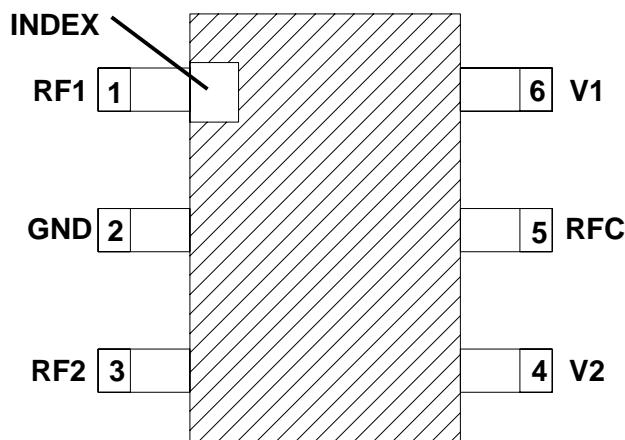
**2.0 mm x 2.1 mm x 1.0 mm**

**Lead (Pb) Free Package**

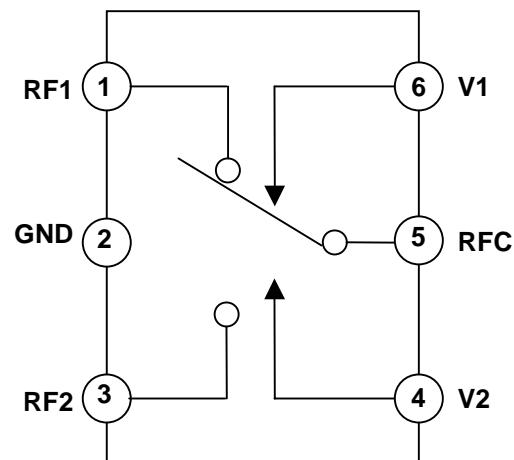
## DESCRIPTION

ES/EMM5326ZW is a single-throw double-pole (SP2T) GaAs PHEMT switch designed for transmit/receive switching applications in the 0.1 GHz to 3.5 GHz frequency range.

ES/EMM5326ZW is ideally suited for applications where high linearity, low control voltage, low insertion loss, high isolation, small size, and low cost are required. The device is in a low-cost, miniature 6-pin SOT-363/SC-70 package.



**Pin Configuration  
(Top View)**



**Function Block Diagram**



## TARGET SPECIFICATIONS

### ABSOLUTE MAXIMUM RATINGS (Ambient Temperature Ta=25°C)

Parameter	Symbol	Rating	Unit
DC Input Voltage	V1, V2	+6	V
Input Power	Pin	+31	dBm
Storage Temperature	Tstg	-40 to +85	°C
Operating Case Temperature	Top	-40 to +85	°C

### ELECTRICAL SPECIFICATIONS (Case Temperature Tc=25°C, with off chip DC blocks)

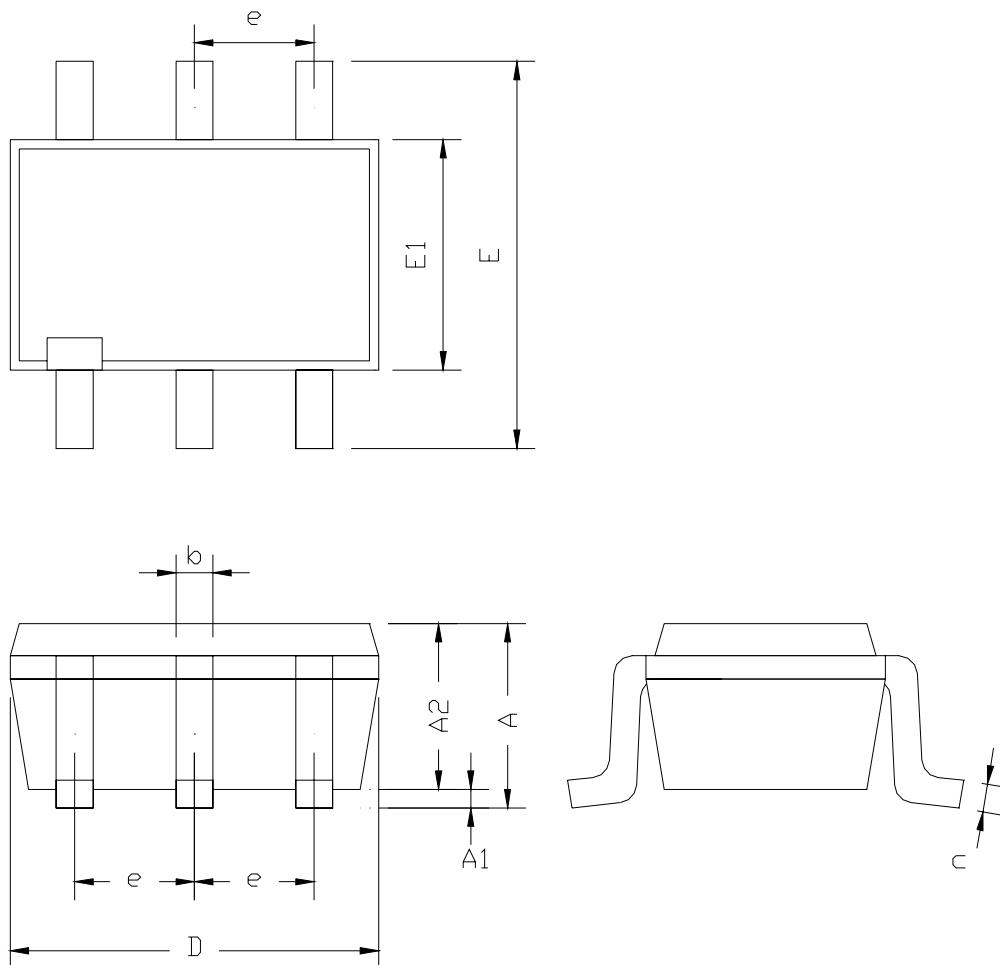
Parameter	Symbol	Condition/comments	Min	Typ	Max	Unit
Frequency range	F		0.1		3.5	GHz
Control Voltage for V1, V2	Vhigh	High	2.5	3.0	3.6	V
	Vlow	Low	-0.2	0	+0.2	V
Control Current (per line)	Icontrol	No RF, V1 or V2 = 3.0 V		15	50	uA
Input P- 0.1dB	P0.1dB	Vhigh= 3.0V, Vlow= 0V		29		dBm
Insertion Loss	I.L.	Freq = 0.5 – 2.5 GHz		0.35		dB
Isolation	ISO	Freq = 0.5 – 2.5 GHz		26		dB
Return Loss	RL	Freq = 0.5 – 2.5 GHz		25		dB

(Unless otherwise specified Zsource=Zload=50Ω System, Tc=25°C)

### TRUTH TABLE

V1	V2	RF1-RFC	RF2-RFC
High	Low	ON	OFF
Low	High	OFF	ON

Specifications and pin assignment may change without notice.

**PACKAGE DIMENSIONS**

Dimension Symbol	Measurement (mm)		
	Min	Nom	Max
A	-	-	1.00
A1	0.025	0.075	0.10
A2	0.85	0.88	0.90
b	0.15	-	0.30
c	0.10	-	0.20
D	1.90	2.00	2.10
E	2.10 BSC		
E1	1.25	1.30	1.35
e	0.65 BSC		