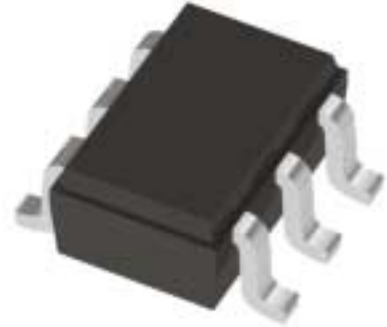


FEATURES

- 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



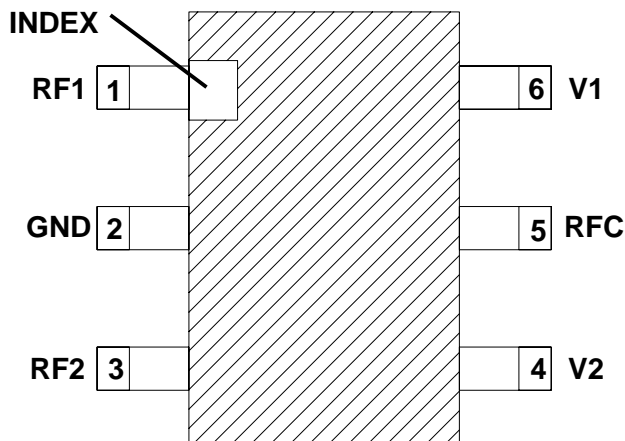
APPLICATIONS

- 802.11b,g Wireless LAN T/R switching

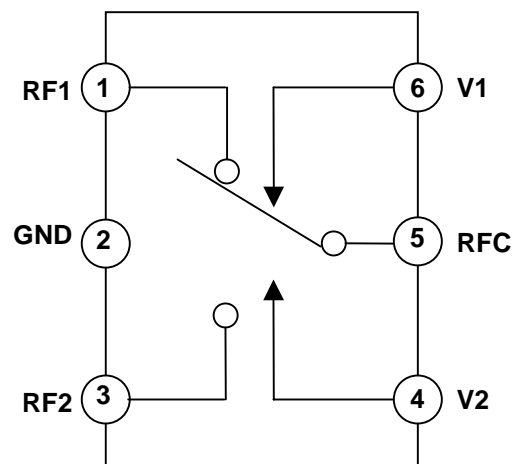
2.0 mm x 2.1 mm x 1.0 mm
Lead (Pb) Free Package

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 |

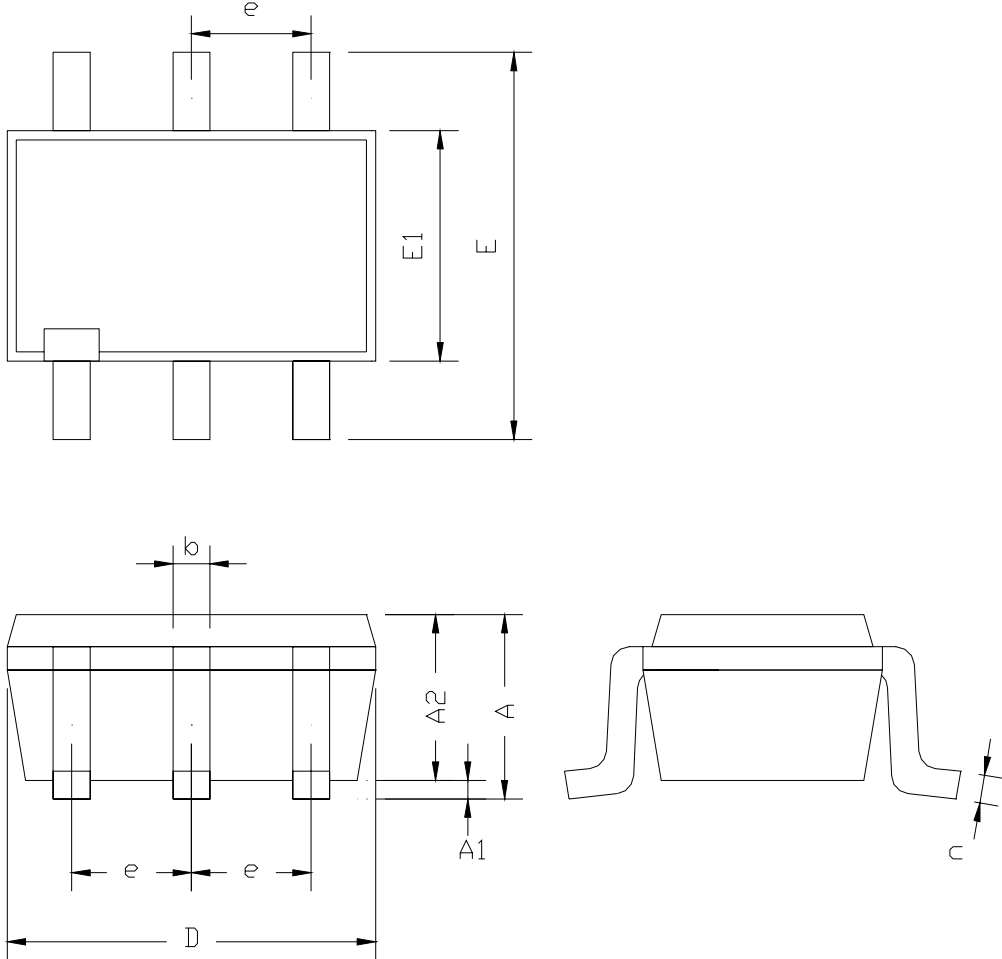
(Unless otherwise specified Zsource=Zload=50Ω System, Tc=25°C)

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 | | |