

N-Channel JFET 40 V, 55 to 95 μA, 0.10 ms, CP 2SK545

Features

- Small I_{GSS}
- Small C_{iss}
- Ultrasmall Package permitting 2SK545-applied Sets to be Compact
- This is a Pb–Free Device

Applications

- Impedance Converter Applications
- Infrared Sensor

ABSOLUTE MAXIMUM RATINGS (at $T_A = 25^{\circ}C$)

| Symbol | Ratings | Unit | | | | | |
|------------------|--|---|--|--|--|--|--|
| V _{DSS} | 40 | V | | | | | |
| V _{GDS} | -40 | V | | | | | |
| I _G | 10 | mA | | | | | |
| Ι _D | 1 | mA | | | | | |
| PD | 100 | mW | | | | | |
| ТJ | 125 | °C | | | | | |
| T _{STG} | -55 to +125 | °C | | | | | |
| | V _{DSS} V _{GDS} I _G I _D P _D T _J | VDSS 40 VGDS -40 IG 10 ID 1 PD 100 TJ 125 | | | | | |

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

B11 = Specific Device Code

SC-59 / CP3

CASE 318BJ

MARKING DIAGRAM

ELECTRICAL CONNECTION

ORDERING INFORMATION

| Device | Package | Shipping [†] |
|---------------------|------------------------|-----------------------|
| 2SK545–11D– TB–E | SC–59/CP3 (Pb–Free) | 3000 / Tape & Reel |

†For information on tape and reel specifications,

Table 1. ELECTRICAL CHARACTERISTICS (at $T_A = 25^{\circ}C$)

| Parameter | Symbol | Conditions | Min | Тур | Max | Unit |
|---------------------------------|----------------------|--|-----|-----|-----|------|
| Gate-to-Drain Breakdown Voltage | V _{(BR)GDS} | $I_D = -10 \ \mu\text{A}, \ V_{DS} = 0 \ \text{V}$ | -40 | | | V |
| Gate Cutoff Current | I _{GSS} | $V_{GS} = -20 \text{ V}, V_{DS} = 0 \text{ V}$ | | | | |

2SK545

TYPICAL CHARACTERISTICS

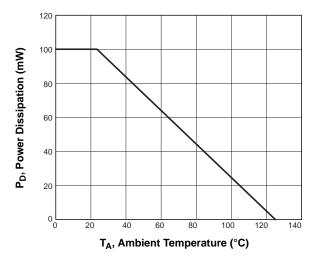


Figure 5. Power Dissipation vs. Ambient Temperature

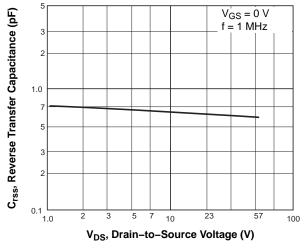


Figure 7. Reverse Transfer Capacitance vs. Drain-to-Source Voltage

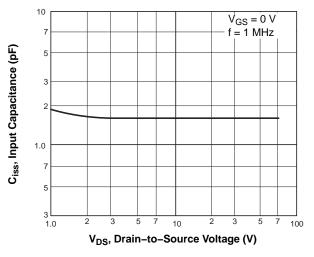
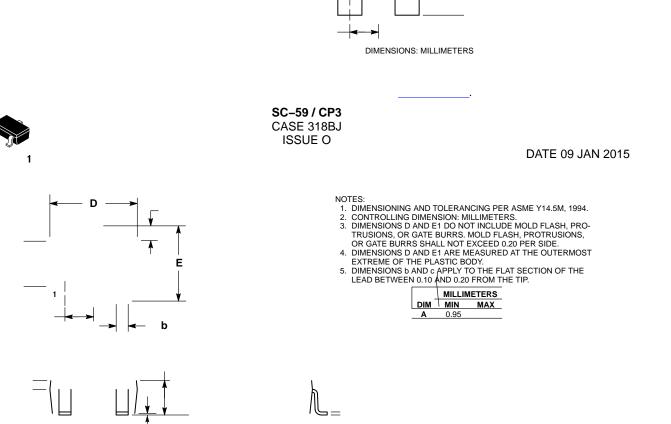


Figure 6. Input Capacitance vs. Drain-to-Source Voltage



onsemi, , and other names, marks, and brands are registered and/or common law trademarks of Semiconductor Components Industries, LLC dba "onsemi" or its affiliates and/or subsidiaries in the United States and/or other countries. onsemi owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property. A listing of onsemi's product/patent coverage may be accessed at www.onsemi.com/site/pdf/Patent-Marking.pdf. Onsemi reserves the right to make changes at any time to any products or information herein, without notice. The information herein is provided "as-is" and onsemi makes no warranty, representation or guarantee regarding the accuracy of the information, product features, availability, functionality, or suitability of its products for any particular purpose, nor does onsemi assume any liability arising out of the application or use of any product or incruit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. Buyer is responsible for its products and applications using onsemi