

2SK1842

Silicon N-Channel Junction FET

For impedance conversion in low frequency

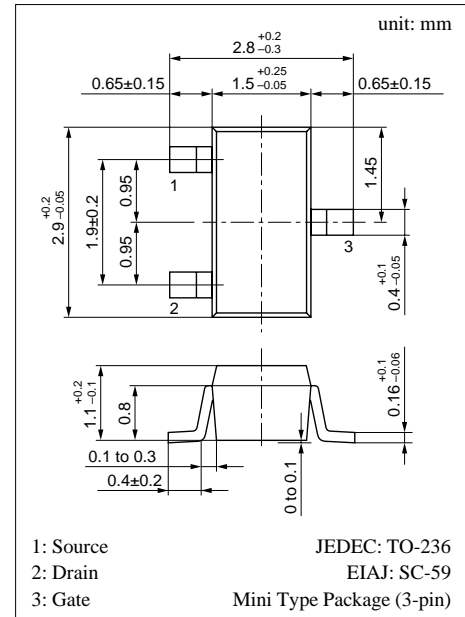
For infrared sensor

■ Features

- Low gate to source leakage current, I_{GSS}
- Small capacitance of C_{iss} , C_{oss} , C_{rss}
- Mini-type package, allowing downsizing of the sets and automatic insertion through the tape/magazine packing.

■ Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Ratings	Unit
Gate to Drain voltage	V_{GDO}	-40	V
Gate to Source voltage	V_{GSO}	-40	V
Drain current	I_D	1	mA
Gate current	I_G	10	mA
Allowable power dissipation	P_D	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C



Marking Symbol (Example): EB

■ Electrical Characteristics (Ta = 25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Drain to Source cut-off current	I_{DSS}^*	$V_{DS} = 10V, V_{GS} = 0$	30		200	μA
Gate to Source leakage current	I_{GSS}	$V_{GS} = -20V, V_{DS} = 0$			-0.5	nA
Gate to Drain voltage	V_{GDS}	$I_G = -10\mu A, V_{DS} = 0$	-40			V
Gate to Source cut-off voltage	V_{GSC}	$V_{DS} = 10V, I_D = 1\mu A$		-1.3	-3	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS} = 10V, V_{GS} = 0, f = 1kHz$	0.05			mS
Input capacitance (Common Source)	C_{iss}	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		1		pF
Output capacitance (Common Source)	C_{oss}			0.4		pF
Reverse transfer capacitance (Common Source)	C_{rss}			0.4		pF

* I_{DSS} rank classification

Runk	O	P	Q	R
I_{DSS} (mA)	30 to 75	50 to 100	70 to 130	100 to 200
Marking Symbol	EBP	EBQ	EBR	EBS

