Elektronische Bauelemente

SCS705F

VOLTAGE 40 V, 0.03 A

Small Signal Schottky Barrier Diode

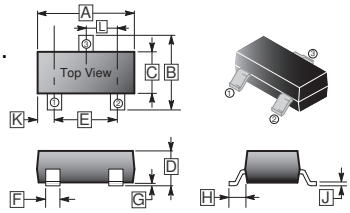
RoHS Compliant Product

A suffix of “-C” specifies halogen & lead-free

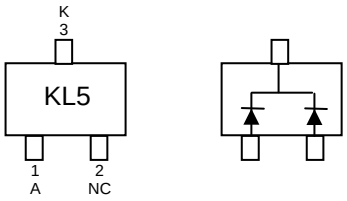
SOT-323

DESCRIPTION

The SCS705F is designed for general purpose detection and high speed switching.



MARKING: KL5



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.80	2.20	G	0.100 REF.	
B	1.80	2.45	H	0.525 REF.	
C	1.15	1.35	J	0.08	0.25
D	0.80	1.10	K	-	-
E	1.20	1.40	L	0.650 TYP.	
F	0.20	0.40			

MAXIMUM RATINGS(T_A=25℃ unless otherwise specified.)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Maximum RMS Voltage	V_{RMS}	28	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Peak Forward Surge Current at 8.3mSec Single Half Sine-Wave	I_{FSM}	0.2	A
Typical Junction Capacitance between Terminal [1]	C_J	2.0	pF
Maximum Average Forward Rectified Current	I_O	0.03	A
Total Power Dissipation	P_D	225	mW
Junction & Storage Temperature	T_J,T_{STG}	125, -40~125	℃

ELECTRICAL CHARACTERISTICS(T_A=25℃ unless otherwise specified.)

PARAMETER	SYMBOL	TYP	UNIT	TEST CONDITION
Maximum Instantaneous Forward Voltage	V_F	0.37	V	I_{F1}=1mA
Maximum Average Reverse Current	I_R	1.0	μA	V_R=10V

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 1.0 volts.

2. ESD sensitive product handling required.

CHARACTERISTIC CURVES

FIG. 1 - FORWARD CHARACTERISTICS

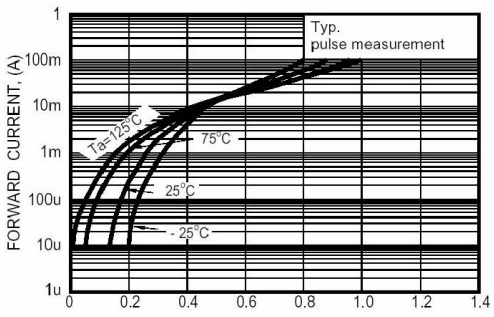


FIG. 2 - REVERSE CHARACTERISTICS

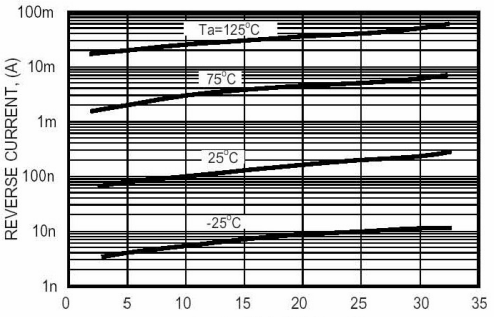


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

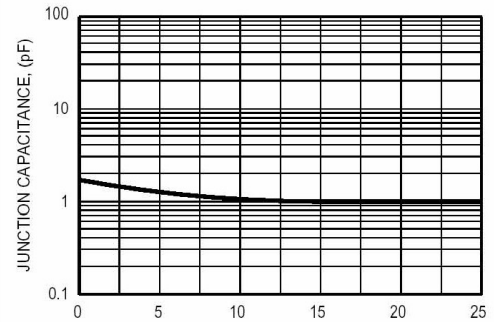


FIG. 4 - REVERSE RECOVERY TIME CHARATERISTICS

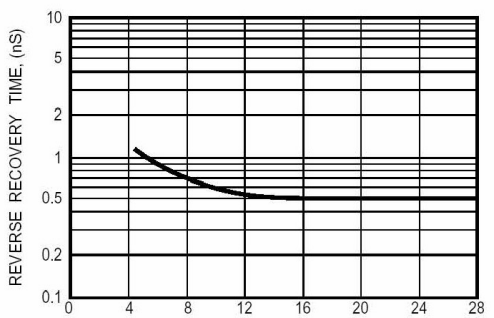


FIG. 5 - TYPICAL FORWARD CURRENT DERAING CURVE

