



DESCRIPTION

The DSR01S30S is available in DFN0603 package.

ORDERING INFORMATION

Package Type	Part Number
DFN0603	DSR01S30S
Note	SPQ: 15,000pcs/Reel
AiT provides all RoHS Compliant Products	

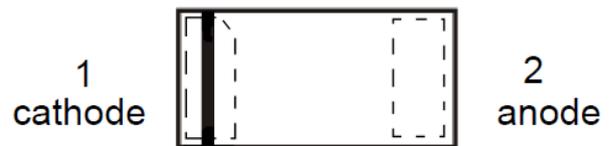
FEATURES

- Extremely small surface mounting type.(DFN0603)
- Low IR.
- High reliability.
- Available in DFN0603 Package

APPLICATIONS

- Low current rectification

PIN DESCRIPTION





ABSOLUTE MAXIMUM RATINGS

T_a = 25°C

V _R , DC Reverse Voltage	30V
I _O , Mean Rectifying Current	100mA
I _{FSM} , Peak Forward Surge Current	2A

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-5 Board ^{NOTE1} @ T _A = 25°C Derate above 25°C	P _D	200 1.58	mW mW/°C
Thermal Resistance, Junction-to-Ambient ^{NOTE1}	R _{θJA}	500	°C/W
Junction Temperature	T _J	125	°C
Storage Temperature Range	T _{STG}	-40~+150	°C
Operating Temperature Range	T _{OP}	-40~+125	°C

NOTE1: FR-5 = 1.0×0.75×0.062 in.

ELECTRICAL CHARACTERISTICS

T_a = 25°C

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage Leakage Current	I _R	V _R = 10Vdc V _R = 30Vdc	-	-	0.35 0.7	μA
Diode Capacitance	C _T	V _R = 0V, f = 1.0MHz	-	8.2	-	pF
Forward Voltage	V _F	I _F = 100mAdc I _F = 10mAdc	-	-	0.62 0.5	V



TYPICAL CHARACTERISTICS

Figure 1. Forward Characteristics

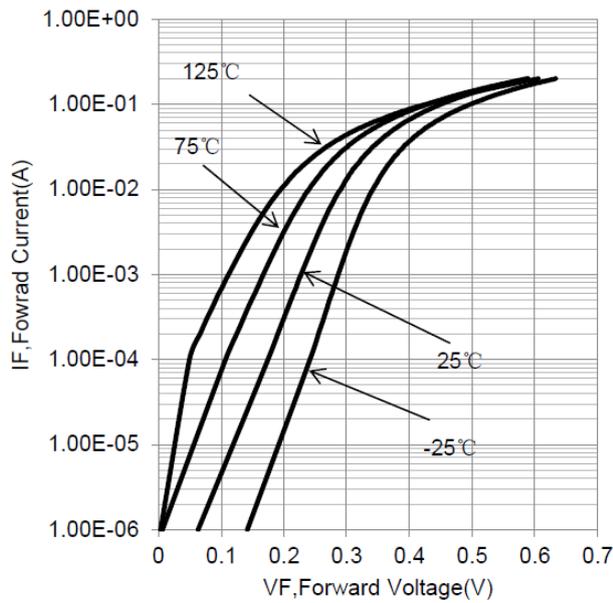


Figure 2. Reverse Characteristics

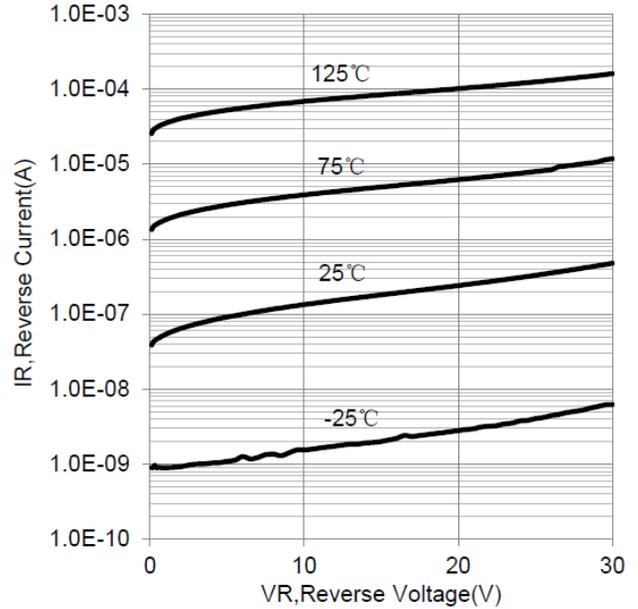
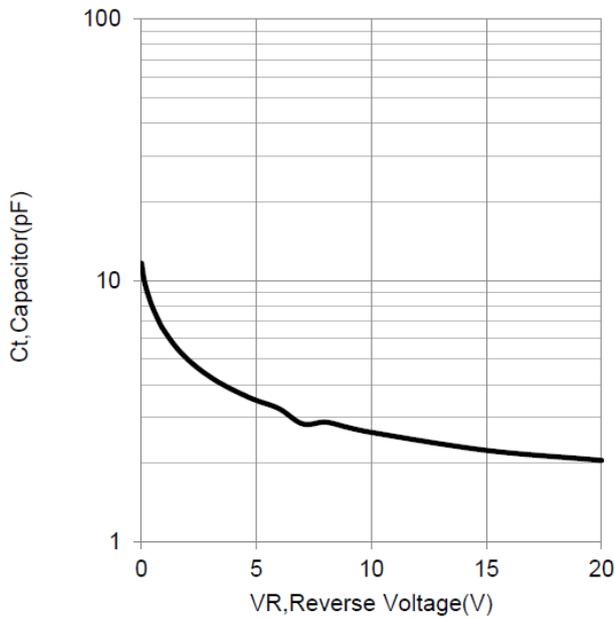


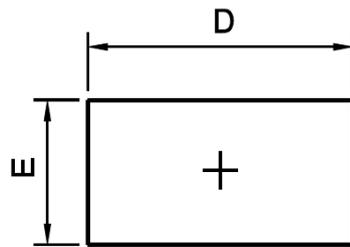
Figure 3. Capacitor Characteristics



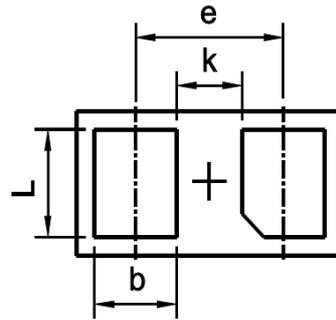


PACKAGE INFORMATION

Dimension in DFN0603 (Unit: mm)



TOP VIEW

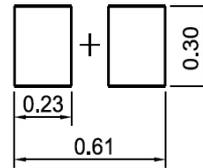


BOTTOM VIEW



SIDE VIEW

SOLDERING FOOTPRINT



DIMENSIONS: MILLIMETERS

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.23	0.33	0.009	0.013
b	0.14	0.24	0.006	0.009
D	0.56	0.66	0.022	0.026
e	0.34REF		0.013REF	
E	0.26	0.36	0.01	0.014
L	0.18	0.28	0.007	0.011
k	0.10	0.2	0.004	0.008



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