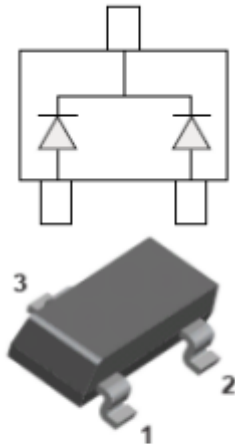


Small-Signal Fast Switching Diodes



SOT-323

Features

- T_{stg} 175 °C
- $I_{FSM} = 100\text{ mA}$
- $I_{RMS} = 10\text{ mA}$
- $I_{SM} = 100\text{ mA}$ (100 ns)
- $I_{SM} = 100\text{ mA}$ (100 ns)

Application

- Rectifier
- Signal diode

Mechanical data

- **Package** SOT-323
- **Terminals** Au-25 µm

Maximum Ratings

Parameter	Symbol	Unit	Value
Operating temperature			175 °C
Forward current	I_{FSM}	mA	100
Reverse current	I_R	µA	10
Forward current	I_{SM}	mA	100
Reverse current	I_{SM}	µA	10
Forward current	I_{RMS}	mA	10
Reverse current	I_{RMS}	µA	10
Storage temperature	T_{stg}	°C	175
Reverse voltage	V_R	V	75
Forward voltage	V_{fV0}	V	0.7



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Electrical Characteristics

Parameter	Symbol	Unit	Conditions	Min	Typ	Max
$V_{CE(sat)}$	X_{CE}	X	$I_C = I_{CE(sat)}$	F_{CE}		
$V_{CE(sat)}$	X_{CE1}	X	$I_C = I_{CE1}$			F_{CE1}
	X_{CE2}	X	$I_C = I_{CE2}$			F_{CE2}
	X_{CE3}	X	$I_C = I_{CE3}$			F_{CE3}
	X_{CE4}	X	$I_C = I_{CE4}$			F_{CE4}
$V_{CE(sat)}$	X_{CE}	X	$I_C = I_{CE(sat)}$			F_{CE}
$R_{th(j-c)}$	θ_{jc}	$^{\circ}C/W$	$I_C = I_{CE(sat)}$			F_{CE}
$V_{CE(sat)}$	V_{CE}	V	$I_C = I_{CE(sat)}$			F_{CE}

Thermal Characteristics

PARAMETER	Symbol	Unit	Value
$V_{CE(sat)}$	θ_{jc}	$^{\circ}C/W$	F_{CE}
$V_{CE(sat)}$	θ_{jc}	$^{\circ}C/W$	F_{CE}

Symbol

$V_{CE(sat)}$: $V_{CE(sat)}$ at $I_C = I_{CE(sat)}$



Characteristics

Fig 1 P_D-T_a Curve

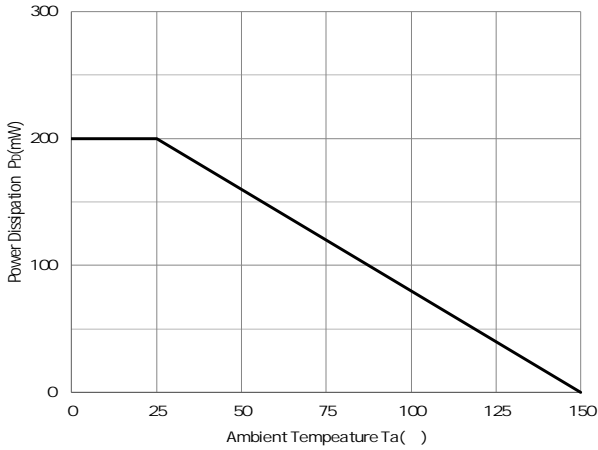


Fig 2 Capacitance Capability

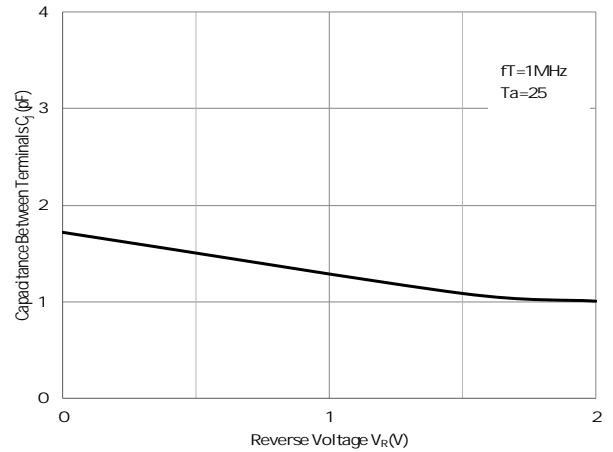


Fig 3 Typical Forward Characteristics

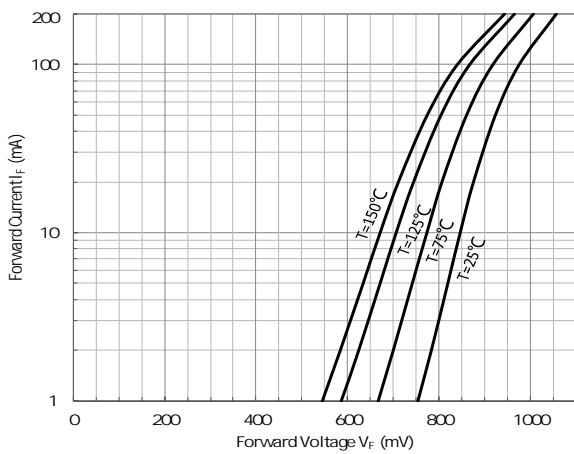
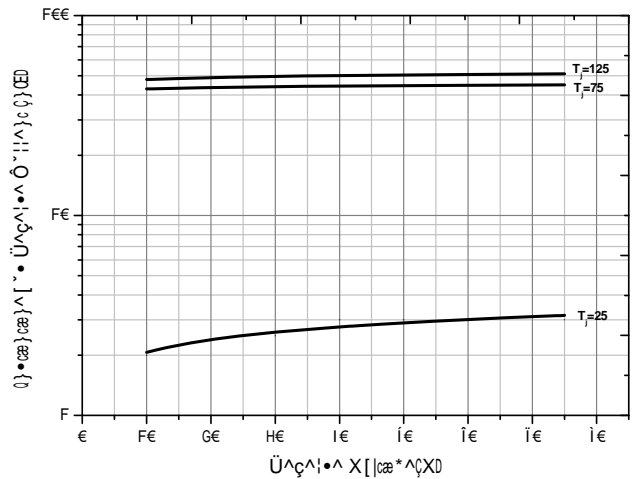


Fig 4 Typical Reverse Characteristics





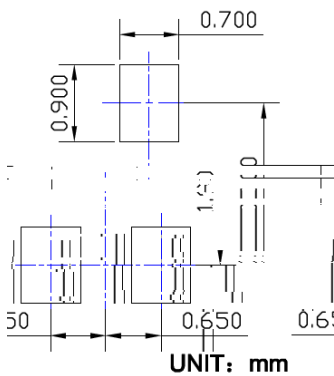
Ordering Information

Prefered P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
0CXFIEYV	0G	0.010	1000	10000	50000	1" (A)

Outline Dimensions

SYMBOL	DIMENSIONS			
	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.035	0.043	0.900	1.100
Δ1	0.000	0.004	0.000	0.100
Δ2	0.035	0.039	0.900	1.010
b	0.035	0.046	0.150	0.400
c	0.000	0.230	0.000	0.220
d	0.000	0.200	0.000	0.200
e	0.050	0.050	0.050	0.045
f	0.096	0.150	0.096	0.088
g	0.000	0.550 TYP	0.000	0.025 T
h	0.055	0.200	0.400	0.047
i	0.000	0.525 REF	0.000	0.025 RE
j	0.018	0.260	0.460	0.010
k	8°	0°	8°	0°

Suggested Pad Layout





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