Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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- 1N6638US,1N6642US, 1N6643US AVAILABLE IN JAN, JANTX, JANTXV AND JANS PER MIL-PRF-19500/578
- 1N6638U,1N6642U, 1N6643U AVAILABLE IN JAN, JANTX, JANTXV AND JANS PER MIL-PRF-19500/578
- SWITCHING DIODES
- NON-CAVITY GLASS PACKAGE
- METALLURGICALLY BONDED

1N6638U & US
1N6642U & US
1N6643U & US

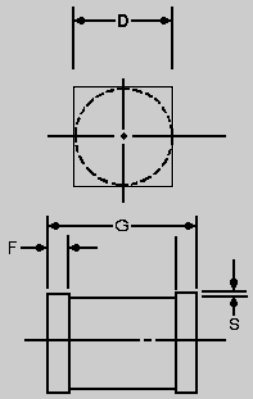
MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C
Storage Temperature: -65°C to +175°C
Operating Current: 300 mA
Derating: 4.6 mA/°C Above T_{EC} = + 110°C
Surge Current: I_{FSM} = 2.5A, half sine wave, P_W = 8.3ms

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified.

TYPES	V_{BR} @ I_R =100 µA	V_{RWM}	V_{F1} I_{FM} =10 mA (Pulsed)	V_{F2} @ I_{F2} (Pulsed)		t_{fr} I_F =50 mA	t_{rr} I_R = 10 mA I_F = 10 mA I_{REC} = 1 mA
	V (pk)	V (pk)	V dc	V dc	mA	ns	ns
1N6638U & US	150	125	0.8	1.1	200	20	4.5
1N6642U & US	100	75	0.8	1.2	100	20	5.0
1N6643U & US	75	50	1.0	1.2	100	20	6.0

TYPES	I_{R1} V_R = 20 V	I_{R2} @V_R = V_{RWM}	I_{R3} V_R = 20 V T_A = 150°C	I_{R4} V_R = V_{RWM} T_A = 150°C	C_{T1} V_R = 0V	C_{T2} V_R = 1.5V
	nA dc	µA dc	µA dc	µA dc	pF	pF
1N6638U & US	35	0.5	50	100	2.5	2.0
1N6642U & US	25	0.5	50	100	5.0	2.8
1N6643U & US	50	0.5	75	160	5.0	2.8



DIM	MILLIMETERS MIN	MILLIMETERS MAX	INCHES MIN	INCHES MAX
D	1.78	2.16	0.070	0.085
F	0.48	0.71	0.019	0.028
G	4.19	4.95	0.165	0.195
S	0.08MIN.		0.003MIN.	

FIGURE 1

DESIGN DATA

CASE: D-5D, Hermetically sealed glass case, per MIL-PRF- 19500/578

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: ($R_{\Theta JEC}$): 50 °C/W maximum at L = 0

THERMAL IMPEDANCE: ($Z_{\Theta JX}$): 25 °C/W maximum

POLARITY: Cathode end is banded.

MOUNTING SURFACE SELECTION: The Axial Coefficient of Expansion (COE) of this device is approximately + 4PPM / °C. The COE of the Mounting Surface System should be selected to provide a suitable match with this device.

Microsemi

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WEBSITE: http://www.microsemi.com

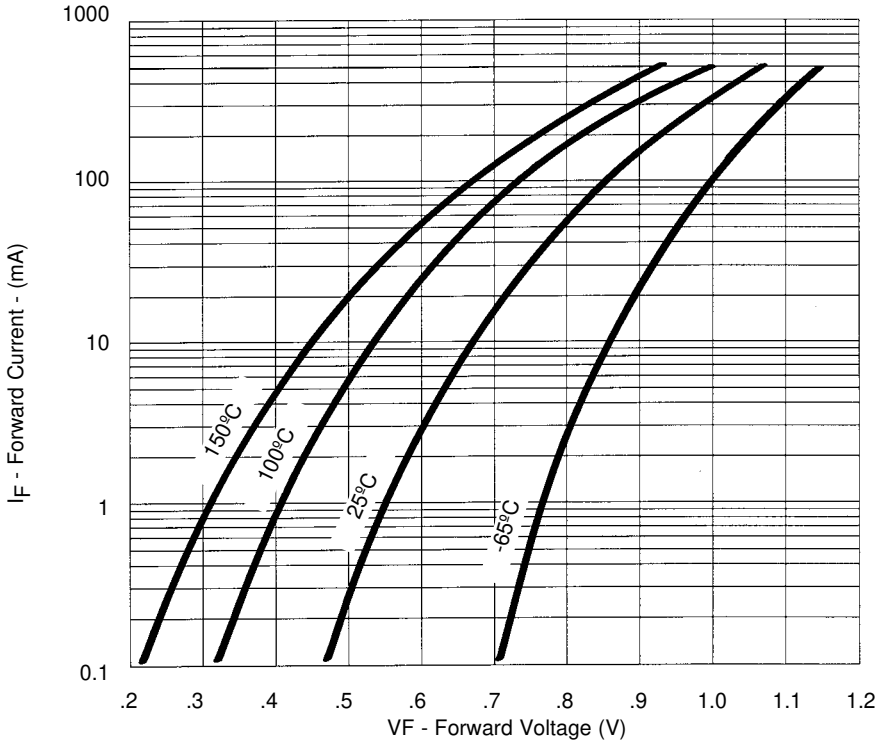
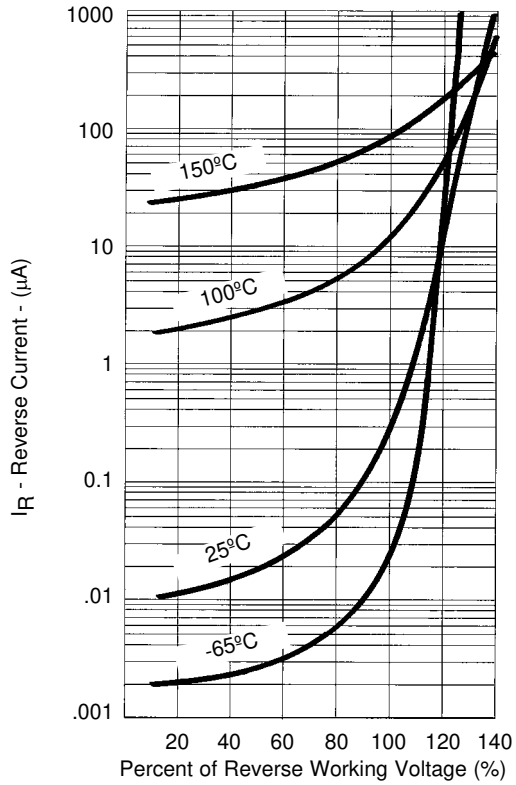


FIGURE 2
Typical Forward Current
vs Forward Voltage



NOTE : All temperatures shown on graphs are junction temperatures

FIGURE 3
Typical Reverse Current
vs Reverse Voltage