



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

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Silicon Super Fast Recovery Diode

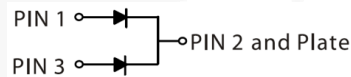
$V_{RRM} = 50\text{ V} - 600\text{ V}$

$I_{F(AV)} = 140\text{ A}$

Features

- High Surge Capability
- Types from 50 V to 600 V V_{RRM}
- Non Isolated to plate
- Not ESD Sensitive

TO-249AB Package



Maximum ratings, at $T_j = 25\text{ }^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Conditions	UFT14005	UFT14010	UFT14020	UFT14040	UFT14060	Unit
Repetitive peak reverse voltage	V_{RRM}		50	100	200	400	600	V
RMS reverse voltage	V_{RMS}		35	70	140	280	420	V
DC blocking voltage	V_{DC}		50	100	200	400	600	V
Operating temperature	T_j		-55 to 150	-55 to 150	-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$
Storage temperature	T_{stg}		-55 to 150	-55 to 150	-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$

Electrical characteristics, at $T_j = 25\text{ }^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Conditions	UFT14005	UFT14010	UFT14020	UFT14040	UFT14060	Unit
Average forward current (per pkg)	$I_{F(AV)}$	$T_C \leq 125\text{ }^\circ\text{C}$	140	140	140	140	140	A
Peak forward surge current (per leg)	I_{FSM}	$t_p = 8.3\text{ ms}$, half sine	1300	1300	1300	1300	1300	A
Maximum instantaneous forward voltage (per leg)	V_F	$I_F = 70\text{ A}$, $T_j = 25\text{ }^\circ\text{C}$	1.0	1.0	1.0	1.3	1.7	V
Maximum reverse current at rated DC blocking voltage (per leg)	I_R	$T_j = 25\text{ }^\circ\text{C}$	25	25	25	25	25	μA
		$T_j = 125\text{ }^\circ\text{C}$	3	3	3	3	3	mA
Maximum reverse recovery time (per leg)	T_{rr}	$I_F = 0.5\text{ A}$, $I_R = 1.0\text{ A}$, $I_{RR} = 0.25\text{ A}$	75	75	75	85	90	ns

Thermal characteristics

Parameter	Symbol	Conditions	UFT14005	UFT14010	UFT14020	UFT14040	UFT14060	Unit
Maximum thermal resistance, junction - case (per leg)	$R_{\theta JC}$		0.60	0.60	0.60	0.60	0.60	$^\circ\text{C/W}$

Figure .1- Typical Forward Characteristics

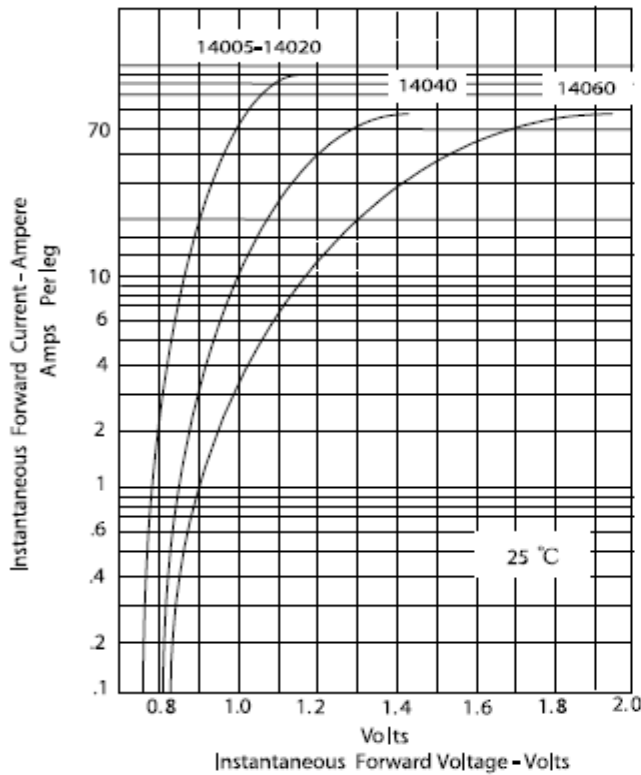


Figure .2- Forward Derating Curve

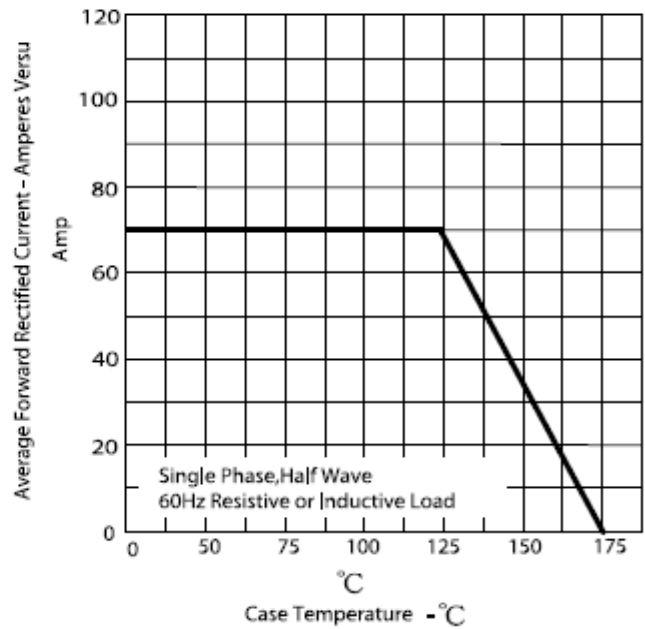


Figure.3- Peak Forward Surge Current

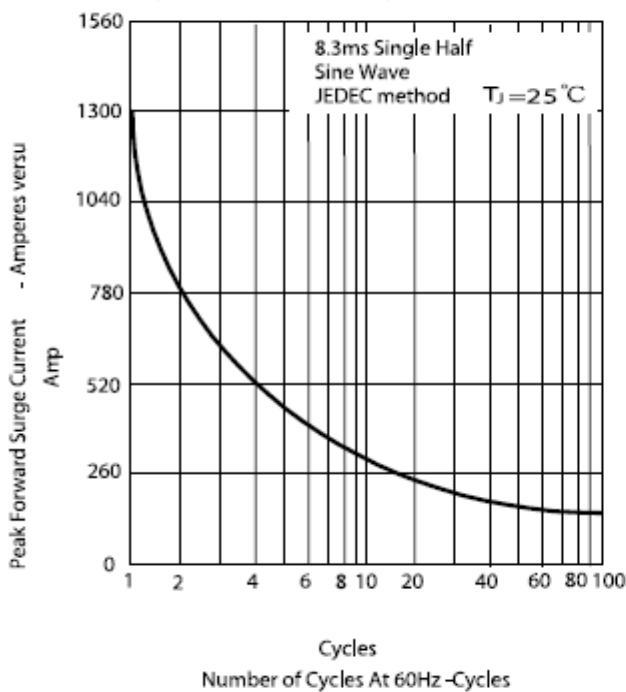
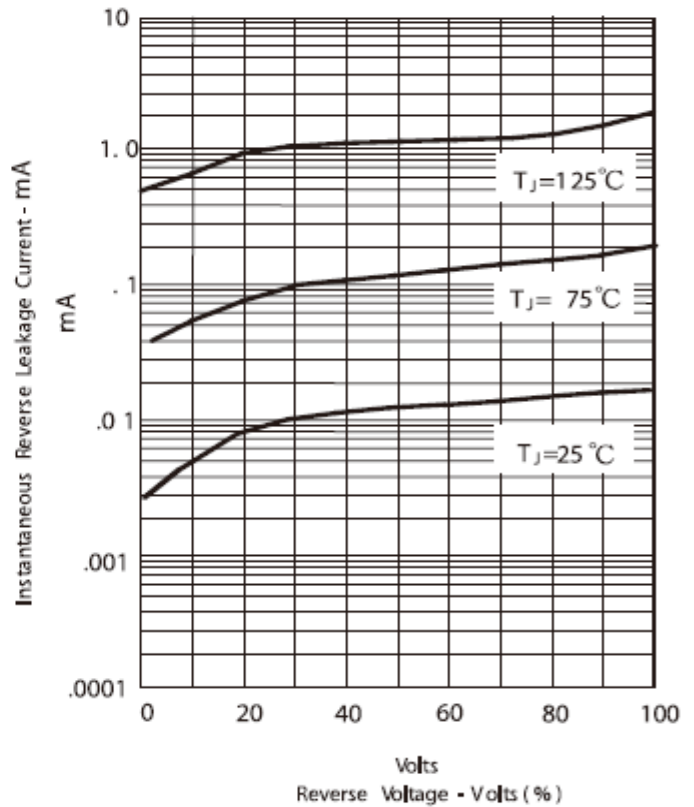
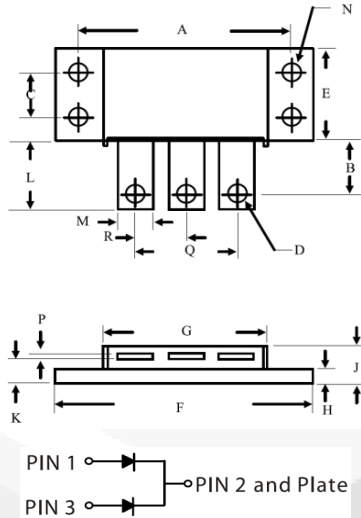


Figure .4-Typical Reverse Characteristics



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



DIM	Inches		Millimeters	
	Min	Max	Min	Max
A	1.995	2.005	50.67	50.93
B	0.300	0.325	7.62	8.26
C	0.495	0.505	12.57	12.83
D	0.182	0.192	4.62	4.88
E	0.990	1.010	25.15	26.65
F	2.390	2.410	60.71	61.21
G	1.495	1.525	37.90	38.70
H	0.114	0.122	2.90	3.10
J	—	0.420	—	10.67
K	0.256	0.275	6.50	7.00
L	0.490	0.510	12.45	12.95
M	0.330	0.350	8.38	8.90
N	0.175	0.195	4.45	4.95
P	0.035	0.045	0.89	1.14
R	0.445	0.455	11.30	11.56
Q	0.890	0.910	22.61	23.11