

## Silicon Super Fast Recovery Diode

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

$I_F = 140\text{ A}$

### Features

- High Surge Capability
- Types up to 600 V  $V_{RRM}$

TO-249AB Package



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

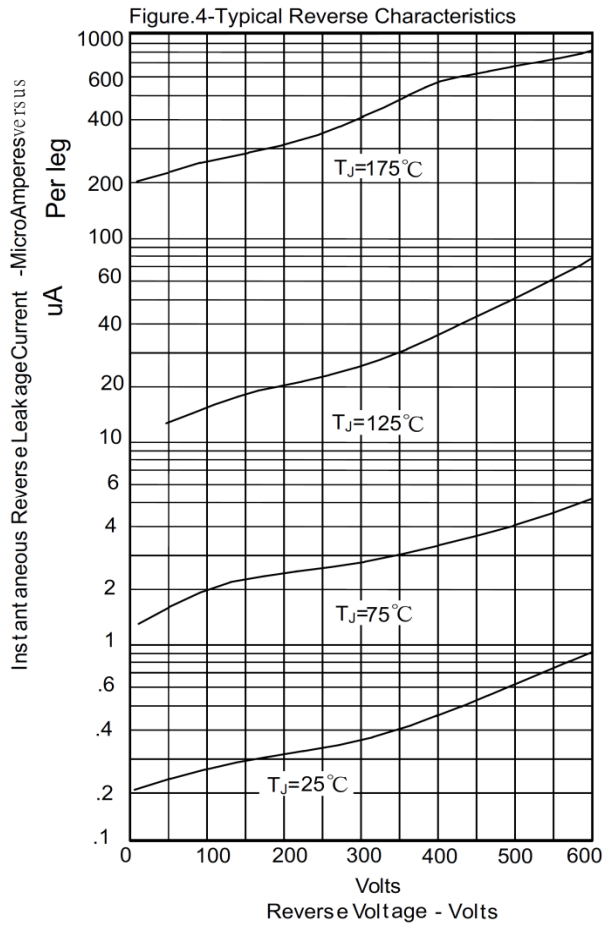
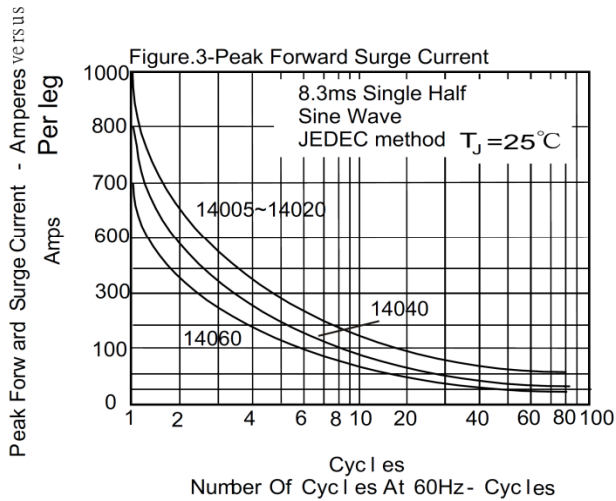
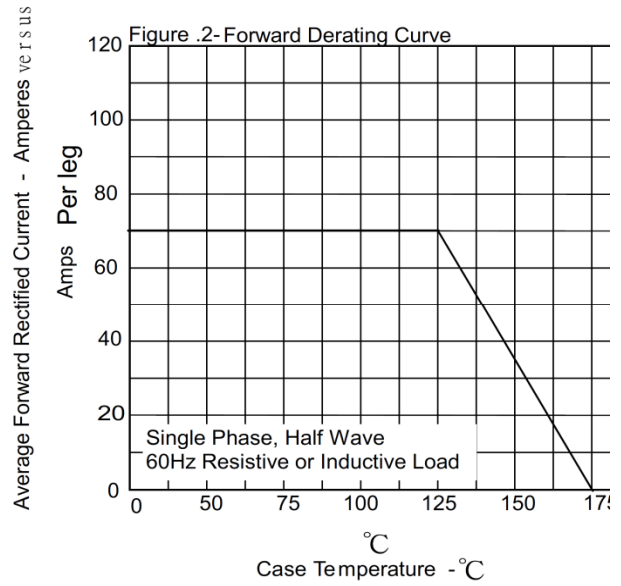
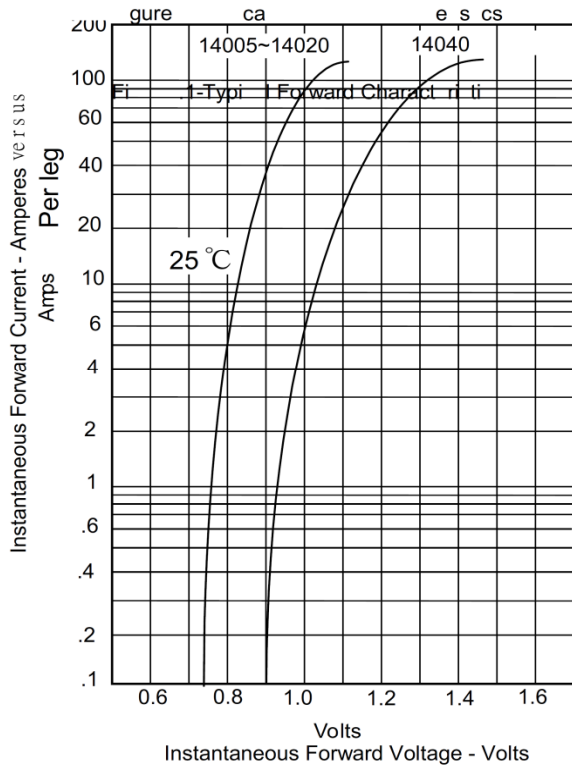
Parameter	Symbol	Conditions	UFT14005	UFT14010	UFT14020	UFT14040	UFT14060	Unit
Repetitive peak reverse voltage	$V_{RRM}$		50	100	200	400	600	V
RMS reverse voltage	$V_{RMS}$		35	70	140	280	420	V
DC blocking voltage	$V_{DC}$		50	100	200	400	600	V
Continuous forward current	$I_F$	$T_C \leq 125\text{ °C}$	140	140	140	140	140	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ °C}$ , $t_p = 8.3\text{ ms}$	1000	1000	1000	800	700	A
Operating temperature	$T_j$		-65 to 175	-65 to 175	-65 to 175	-65 to 175	-65 to 175	°C
Storage temperature	$T_{stg}$		-65 to 175	-65 to 175	-65 to 175	-65 to 175	-65 to 175	°C

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

Parameter	Symbol	Conditions	UFT14005	UFT14010	UFT14020	UFT14040	UFT14060	Unit
Diode forward voltage	$V_F$	$I_F = 70\text{ A}$ , $T_j = 25\text{ °C}$	1.3	1.3	1.3	1.3	1.7	V
Reverse current	$I_R$	$V_R = 50\text{ V}$ , $T_j = 25\text{ °C}$	25	25	25	25	25	$\mu\text{A}$
		$V_R = 50\text{ V}$ , $T_j = 125\text{ °C}$	1	1	1	1	1	mA

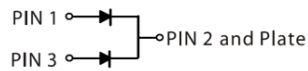
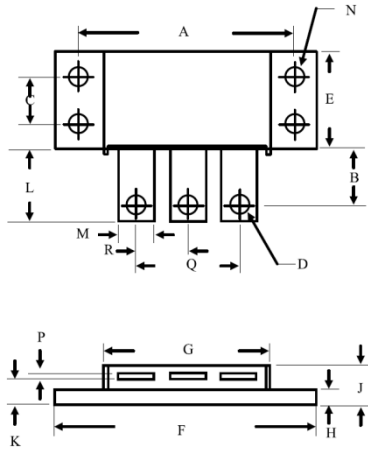
### Recovery Time

Maximum reverse recovery time	$T_{RR}$	$I_F = 0.5\text{ A}$ , $I_R = 1.0\text{ A}$ , $I_{RR} = 0.25\text{ A}$	75	75	75	75	90	nS
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## 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