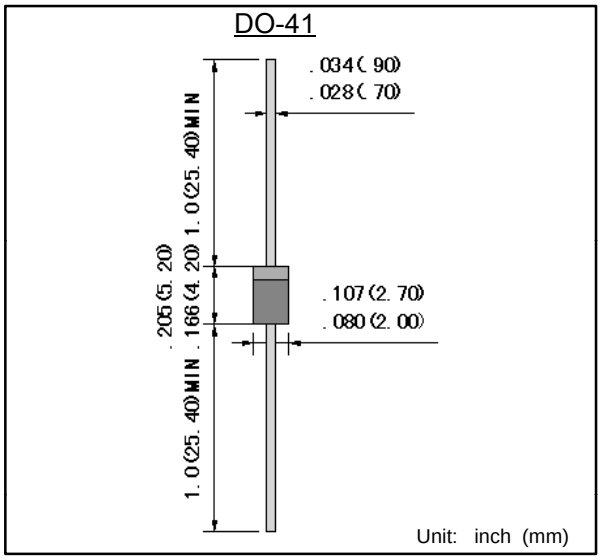
Amber Electronic Limited

UF4001-UF4007

Plastic High-efficiency Rectifers

Reverse Voltage 50 ~ 1000V

Forward Current 1.0 A



Features

- Low reverse leakage
- High forward surge capability
- High reliability
- High temperature soldering guaranteed: 260℃/10seconds,9.5mm lead length
- Lead and body according with RoHS standard
- Green compound with suffix "-F" on Marking

Mechanical Data

- Case:DO-41 Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Pure tin plated, lead free

Maximum Ratings & Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

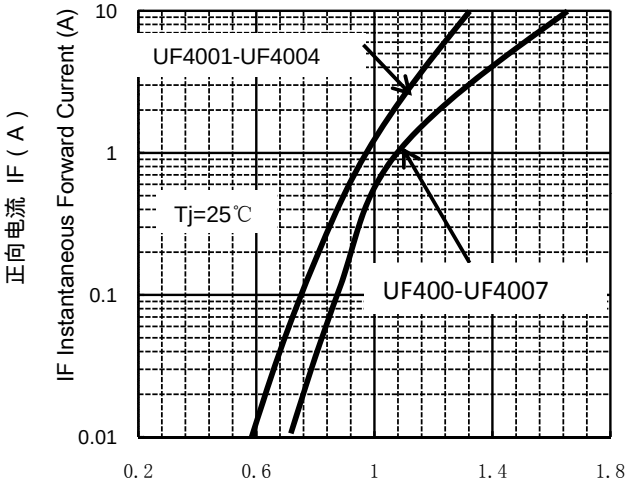
Parameter	Symbols	UF 4001	UF 4002	UF 4003	UF 4004	UF 4005	UF 4006	UF 4007	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	$I_{F(AV)}$	1.0							A
Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	I_{FSM}	30							A
Maximum forward voltage @IF=1.0A	V_F	1.00				1.70			V
最大反向电流 @V_{DC} TA= 25℃	I_R	5.0							μA
Maximum reverse current TA= 100℃		100							
MAX. reverse recovery time IF=0.5A , IR=1.0A ,IRR=0.25A	Trr	50				75			ns
Typical thermal resistance (Note 1)	RθJA	60							℃/W
Type junction capacitance VR=4.0V,f=1MHz	Cj	17							pF
Operating junction and storage temperature rang	Tj, TSTG	-55 --- +150							℃

Note:

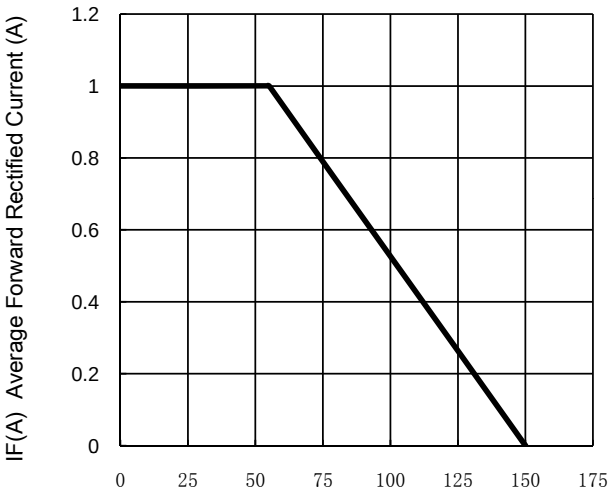
1) Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, PCB mounted.

Characteristic Curves

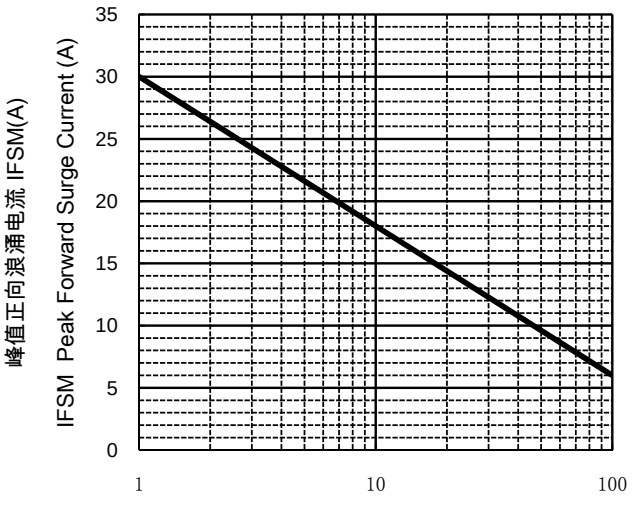
TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE
PEAK FORWARD SURGE CURRENT



Typical Reverse Characteristics