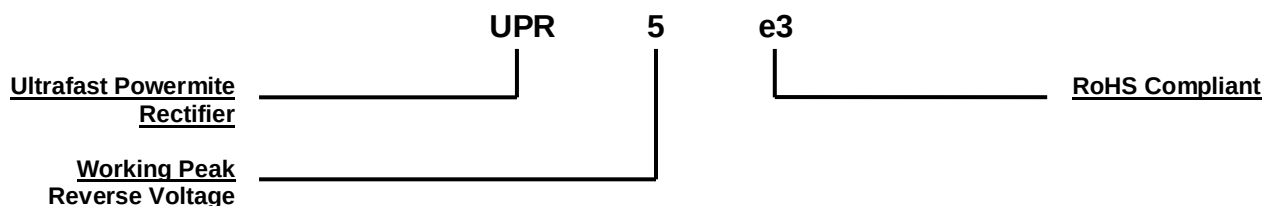


MECHANICAL and PACKAGING

- CASE: Void-free transfer molded thermosetting epoxy compound meeting UL94V-0
- TERMINALS: Annealed matte-tin plating over copper and readily solderable per MIL-STD-750, method 2026. (Consult factor for tin-lead plating.)
- MARKING: R05• for UPR5e3, R10• for UPR10e3, and R15• for UPR15e3 (dot indicates "e3" designation)
- POLARITY: Cathode designated by TAB 2
- TAPE & REEL option: 12 mm tape per standard EIA-481-B. Consult factory for quantities.
- WEIGHT: Approximately 0.016 gram
- See [Package Dimensions](#) on last page.

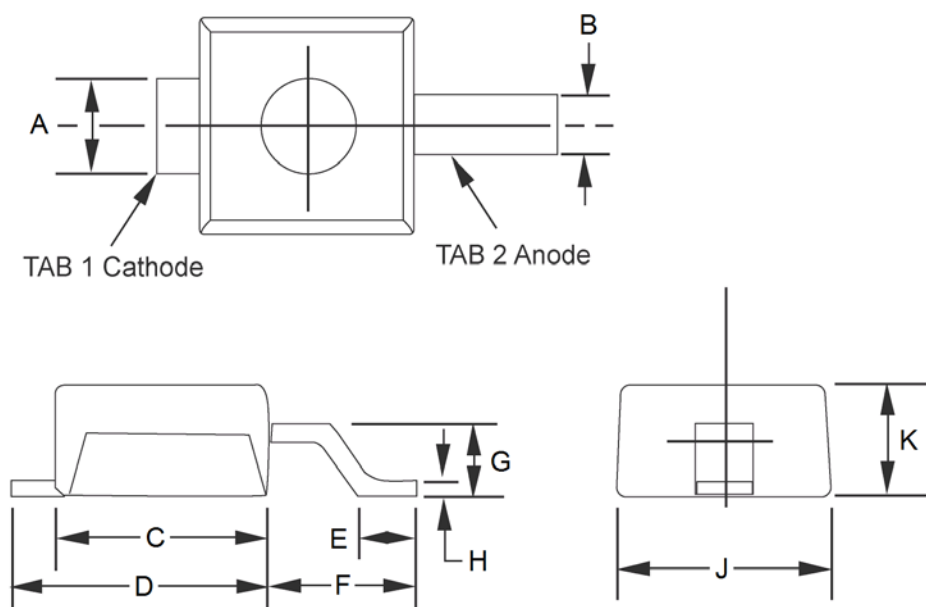
PART NOMENCLATURE

SYMBOLS & DEFINITIONS

Symbol	Definition
f	Frequency
I_F	Forward Current: The dc current flowing from the external circuit into the anode terminal
I_{FSM}	Surge Peak Forward Current: The forward current including all nonrepetitive transient currents but excluding all repetitive transients (ref JESD282-B)
I_O	Average Rectified Output Current: The Output Current averaged over a full cycle with a 50 Hz or 60 Hz sine-wave input and a 180 degree conduction angle.
I_R	Reverse Current: The dc current flowing from the external circuit into the cathode terminal at the specified voltage V_R
I_{REC}	Recovery Current:
V_R	Reverse Voltage: A positive dc cathode-anode voltage below the breakdown region
V_{RWM}	Working Peak Reverse Voltage: The peak voltage excluding all transient voltages (ref JESD282-B). Also sometimes known historically as PIV.

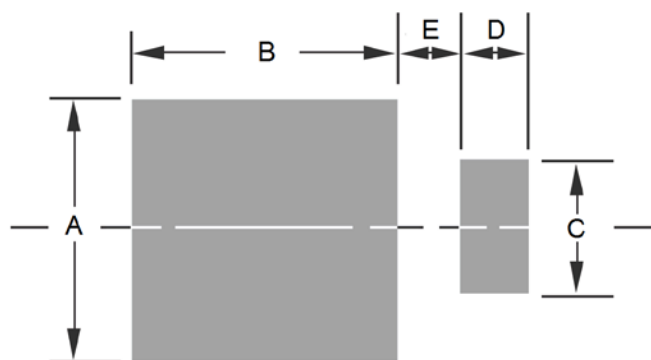
ELECTRICAL CHARACTERISTICS @ $T_A = +25^\circ\text{C}$ unless otherwise noted

Parameter	Symbol	Conditions	Min	Max	Units
Forward Voltage (Note 1)	V_F	$I_F = 2.0$ Amps		0.975	V
Forward Voltage (Note 1)	V_F	$I_F = 2.0$ Amps, $T_J = 100^\circ\text{C}$		0.895	V
Reverse Current	I_R	$V_R = V_{RWM}$, $T_J = 25^\circ\text{C}$		2.0	μA
Reverse Current	I_R	$V_R = V_{RWM}$, $T_J = 100^\circ\text{C}$		50	μA
Reverse Recovery Time	t_{rr}	$I_F = 0.5$ A; $I_R = 1.0$ A; $I_{REC} = 0.25$ A		25	ns

Note 1: Short duration test pulse used to minimize self – heating effect.

PACKAGE DIMENSIONS


Ltr	Dimensions			
	Inch		Millimeters	
	Min	Max	Min	Max
A	0.029	0.039	0.73	0.99
B	0.016	0.026	0.40	0.66
C	0.070	0.080	1.77	2.03
D	0.087	0.097	2.21	2.46
E	0.020	0.030	0.50	0.76
F	0.051	0.061	1.29	1.54
G	0.021	0.031	0.53	0.78
H	0.004	0.008	0.10	0.20
J	0.070	0.080	1.77	2.03
K	0.035	0.045	0.89	1.14

MOUNTING PAD DIMENSIONS


Ltr	Dimensions	
	Inch	Millimeters
A	0.100	2.54
B	0.105	2.67
C	0.050	1.27
D	0.030	0.76
E	0.025	0.64