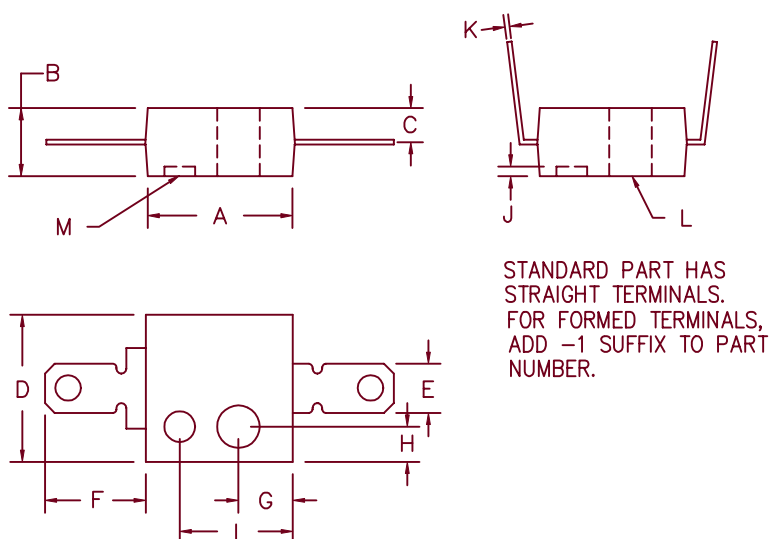


Quick Connect Controlled Avalanche Rectifier KP247 — KP647



STANDARD PART HAS STRAIGHT TERMINALS. FOR FORMED TERMINALS, ADD -1 SUFFIX TO PART NUMBER.

Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.615	.635	15.62	16.13	
B	.275	.285	6.99	7.24	
C	.137	.143	3.48	3.63	
D	.615	.635	15.62	16.13	
E	.245	.255	6.22	6.48	
F	.490	.510	12.45	12.95	
G	.245	.255	6.22	6.48	
H	.157	.167	3.99	4.24	
I	.455	.465	11.56	11.81	
J	.057	.067	1.45	1.70	
K	.028	.032	0.71	0.81	
L		.169		4.29	Dia.
M		.125		3.18	Dia.

Microsemi Catalog
Number

KP247
KP447
KP457
KP647

Avalanche
Voltage Range

250V — 700V
450V — 900V
430V — 1270V
650V — 1100V

- Rugged Construction
- Glass Passivated Die
- Convenient Mounting
- Quick Connect 1/4" Tabs

Electrical Characteristics

Average Forward Current	$I_{F(AV)}$ 5 Amps	$T_A = 40^\circ\text{C}$, Natural Convection
Average Forward Current	$I_{F(AV)}$ 8 Amps	$T_A = 40^\circ\text{C}$, 200 LFM Forced Air Convection
Maximum Surge Current	I_{FSM} 225 Amps	8.3ms, half sine
Max. I^2t For Fusing	I^2t 210 A^2s	
Max. Peak Forward Voltage	V_{FM} 1.0 Volts	$I_{FM} = 6.0\text{A}$, $T_J = 25^\circ\text{C}^*$
Max. Peak Reverse Current	I_{RM} 5 μA	V_{RRM} , $T_J = 25^\circ\text{C}$

*Pulse test: Pulse width 300 μsec Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temp range	T_{STG}	-55°C to 175°C
Operating junction temp range	T_J	-55°C to 150°C
Weight		.15 ounces (4.8 grams) typical

KP247 — KP647

Figure 1
Typical Forward Characteristics

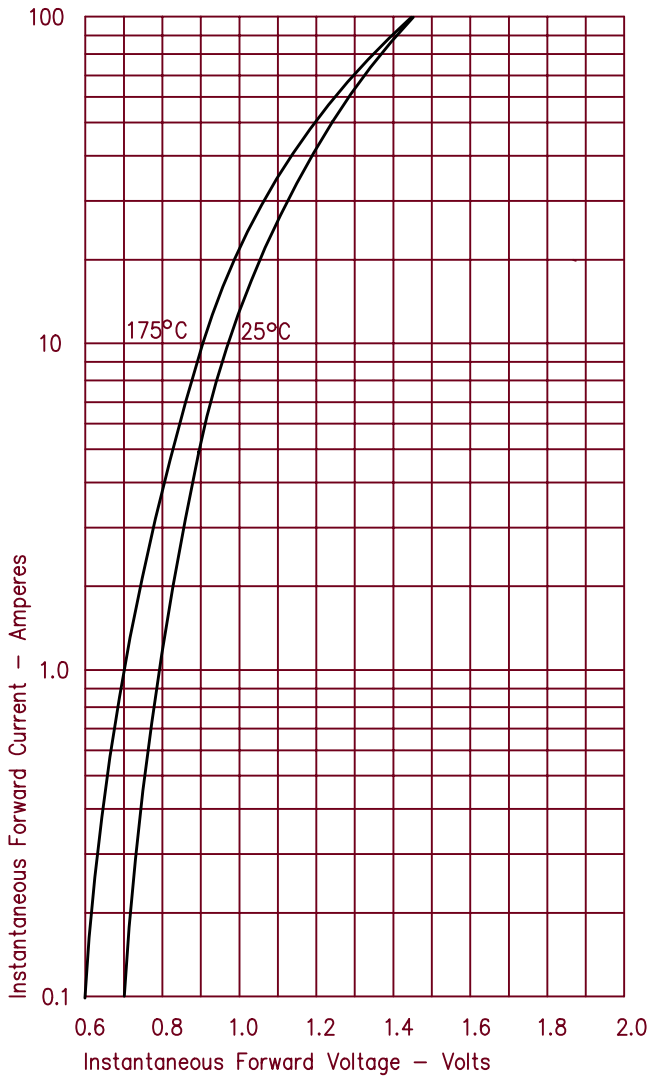


Figure 3
Forward Current Derating

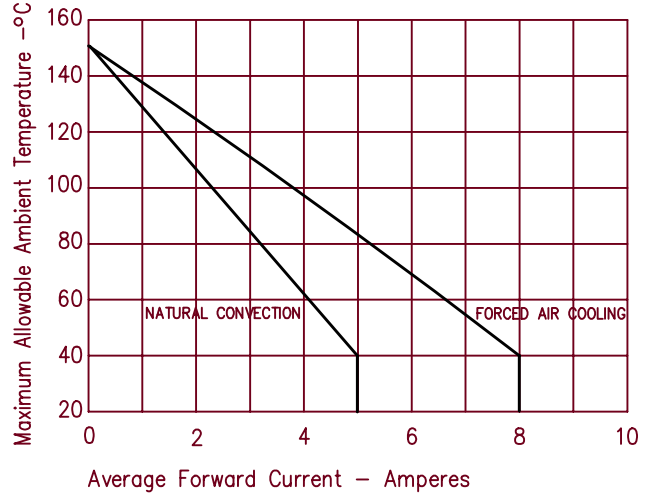


Figure 2
Typical Reverse Characteristics

