

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

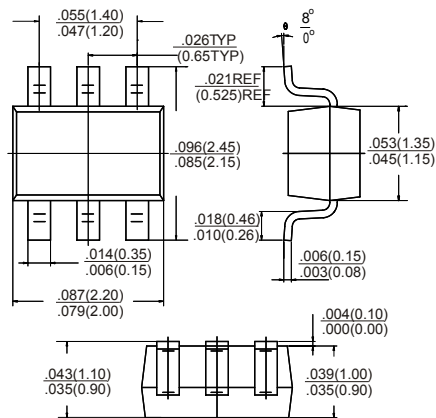
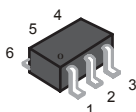
SOT-363

FEATURES

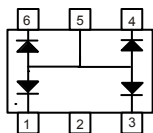
- Fast Switching Speed
- Ultra-Small Surface Mount Package
- High Conductance Power dissipation

MECHANICAL DATA

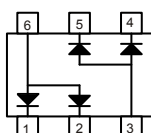
- Case: SOT-363, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagrams Below
- Weight: 0.006 grams (approx.)
- Mounting Position: Any



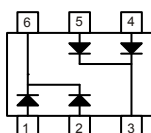
Dimensions in inches and (millimeters)



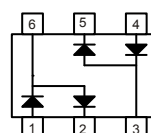
MMBD4448HAQW
Marking: KA5



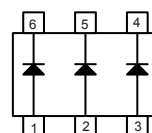
MMBD4448HADW
Marking: KA6



MMBD4448HCDW
Marking: KA7



MMBD4448HSDW
Marking: KAB



MMBD4448HTW
Marking: KAA

MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

Rating	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Reverse Voltage	V _{RRM}	80	V
RMS Reverse Voltage	V _{R(RMS)}	57	V
Average Rectified out Current(Note 1)	I _o	250	mA
Forward Continuous Current (Note 1)	I _{FM}	500	mA
Thermal Resistance Junction to Ambient Air (Note1)	R _{thJA}	625	°C/W
Storage Temperature Range	T _{stg}	-55 to +150	°C

Notes: 1. Device mounted on FR-4 PCB, 1 inch x 0.85 inch x 0.062 inch; pad layout as shown on Diodes Inc. suggested pad layout

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted) (EACH DIODE)

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage (Note 2)	V(BR)R	80	∅	V
Forward Voltage (Note 2) I _F =5.0mA I _F =10mA I _F =100mA I _F =150mA	V _F	0.62 — — —	0.72 0.855 1.0 1.25	V
Reverse Current (Note 2) V _R =70V V _R =75V, T _j =150°C V _R =25V, T _j =150°C V _R =20V	I _R	— — — —	100 50 30 25	nA uA uA nA
Total Capacitance V _R =6V, f=1.0MHz	C _T	—	3.5	pF
Reverse Recovery Time I _F =I _R =10mA, I _{rr} =0.1X I _R , R _L =100 Ohms	t _{rr}	—	4.0	nS

Note 2. Short duration test pulse used to minimize self-heating.

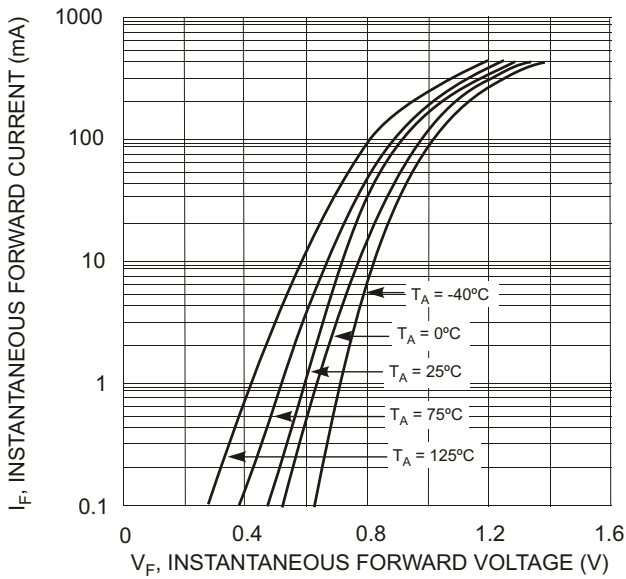


Fig. 1 Typical Forward Characteristics

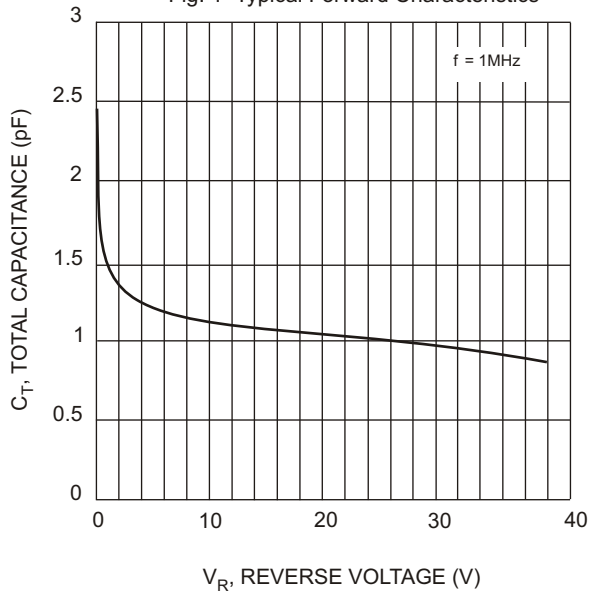


Fig. 3 Typical Total Capacitance vs. Reverse Voltage

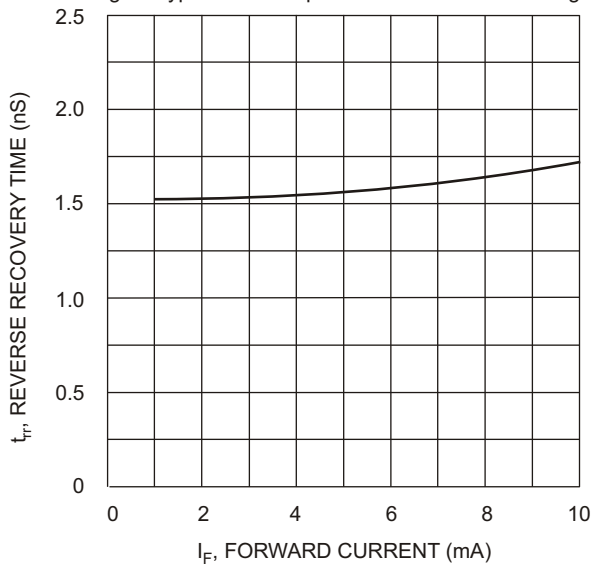


Fig. 5 Reverse Recovery Time vs Forward Current.

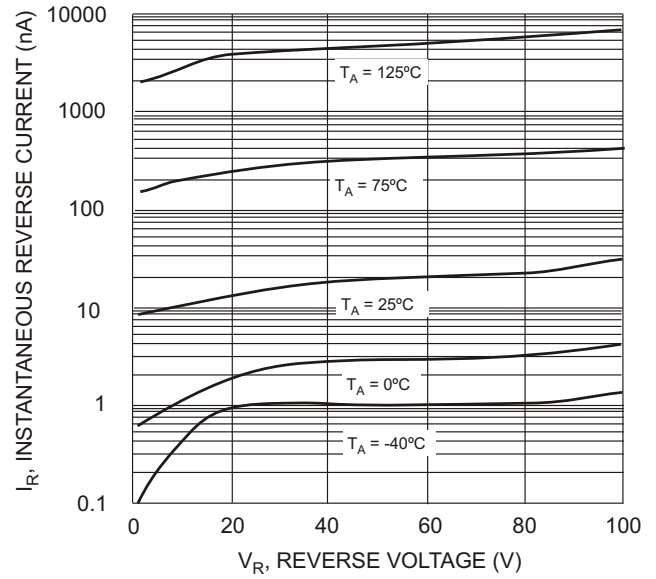


Fig. 2 Typical Reverse Characteristics

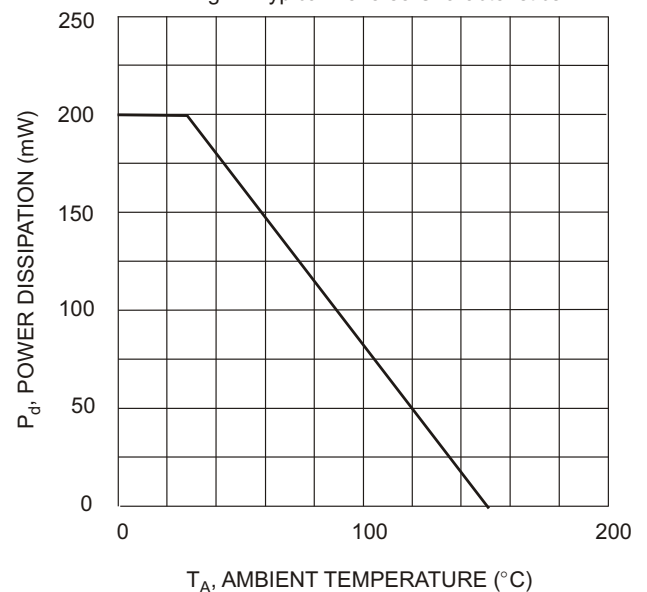


Fig. 4 Power Derating Curve, Total Package