

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Surface Mount Package Ideally Suited for Automatic Insertion
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 667°C/W Junction to Ambient

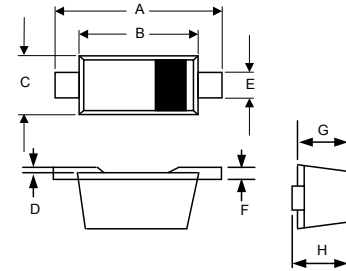
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
B5817X2	4A	40V	28V	40V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1A	
Non-Repetitive Peak Forward Surge Current	I_{FSM}	4A	8.3ms Half Sine
Maximum Instantaneous Forward Voltage	V_F	0.30V 0.40V 0.60V	$I_F=10mA$; $I_F=100mA$; $I_F=1A$;
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	20µA 30µA 50µA	$V_R = 10V, T_A=25°C$ $V_R = 20V, T_A=25°C$ $V_R = 40V, T_A=25°C$
Capacitance Between Terminals	C_T	120pF	$V_R=0, f=1MHz$
Power Dissipation	P_D	150mW	

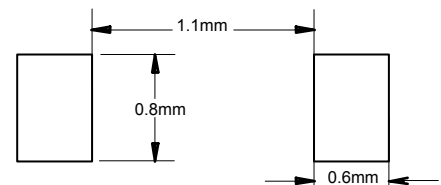
**1 Amp
Schottky Rectifier
40 Volts**

SOD-523



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.059	0.067	1.50	1.70	
B	0.043	0.051	1.10	1.30	
C	0.030	0.033	0.75	0.85	
D	0.000	0.003	0.00	0.07	
E	0.010	0.014	0.25	0.35	
F	0.003	0.008	0.08	0.20	
G	0.020	0.026	0.50	0.65	
H	0.020	0.026	0.50	0.65	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

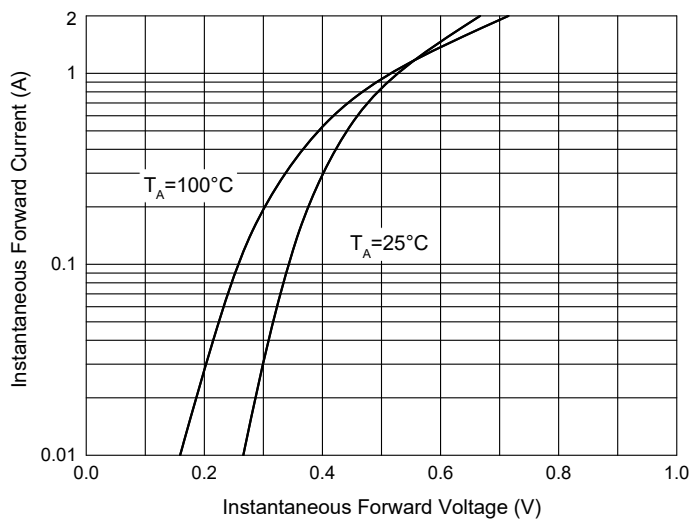


Fig. 2 - Typical Reverse Leakage Characteristics

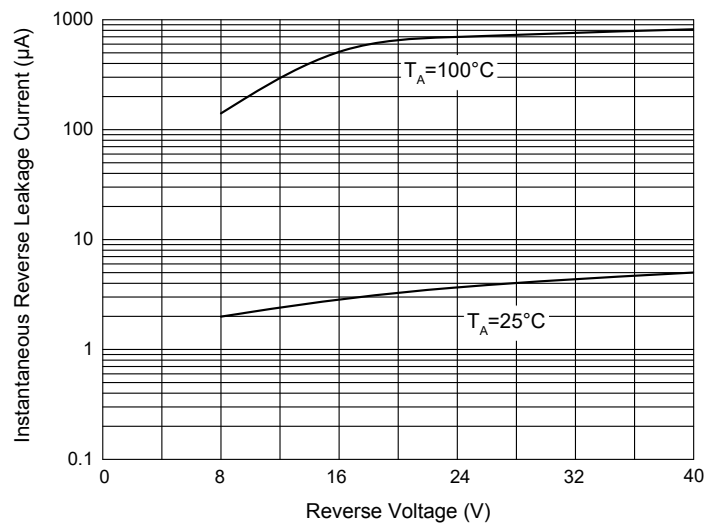
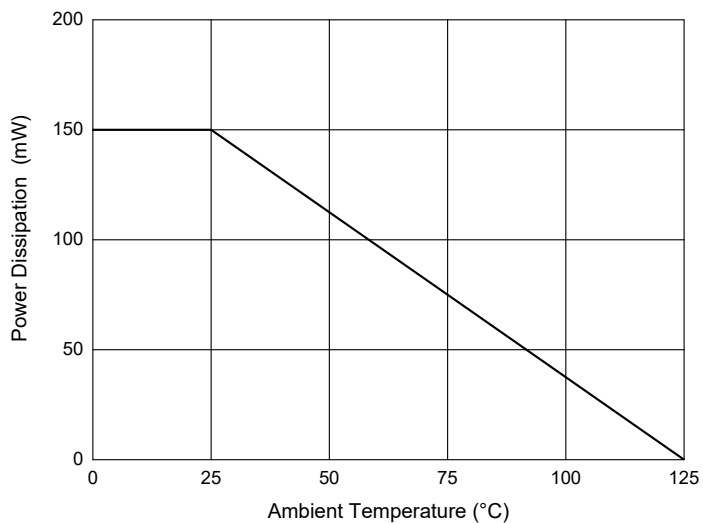


Fig. 3 - Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 8Kpcs/Reel

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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