



SWITCHING DIODE

FEATURES

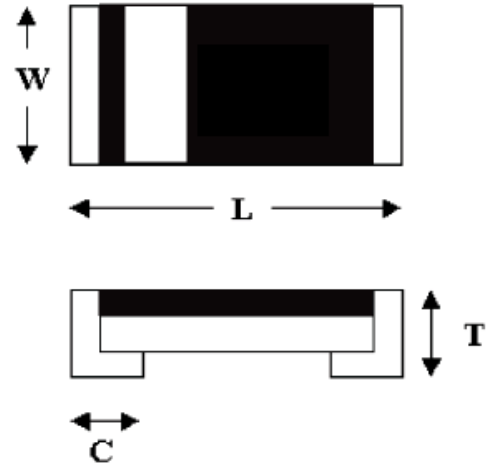
- Silicon epitaxial planar diode
- Leadfree and RoHS compliance components

MECHANICAL DATA

- Size: 0805
- Weight: approx. 6mg
- Marking: Cathode terminal

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

0805



Dimension/mm	0805
L	2.0±0.2
W	1.25±0.2
T	0.85±0.1
C	0.45±0.2

ELECTRICAL CHARACTERISTICS¹⁾ Tamb=25°C, unless otherwise specified

Parameter	Symbol	Value	Unit
Forward Power Dissipation Power derating above 25°C	P _{tot}	200	mW
		1.6	mW/°C
Thermal Resistance Junction to Ambient Air	R _{θJA}	375	°C/W
Junction temperature	T _j	150	°C
Operating & Storage Temperature range	T _{stg}	-55 to +150	°C

MAXIMUM RATING¹⁾ Tamb=25°C, unless otherwise specified

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	75	V
Average rectified current sin half wave rectification with resistive load	I _{F(AV)}	150	mA
Repetitive Peak Forward Current at Tamb=25°C	I _{FRM}	300	mA
Non-Repetitive Surge Forward Current @ t<1s and T _j =25°C @ t ≤ 8.3ms and T _j =25°C	I _{FSM}	500	mA
		1000	mA

ELECTRICAL CHARACTERISTICS¹⁾ Tamb=25°C, unless otherwise specified

Parameter	Symbol	Value	Unit
Forward voltage at I _F =10mA	V _F	1.0 MAX.	V
		1.25 MAX.	
Leakage current V _R =20V	I _R	0.025 MAX.	uA
		5 MAX.	
Capacitance at V _R =0V, f=1MHz	C _{tot}	4 MAX.	pF
Reverse Recovery Time at I _F =I _R =10mA, R _L =100Ω	t _{rr}	4 MAX.	ns

NOTE: 1. Valid provided that electrodes are kept at ambient temperature



Figure 1. Forward Characteristic

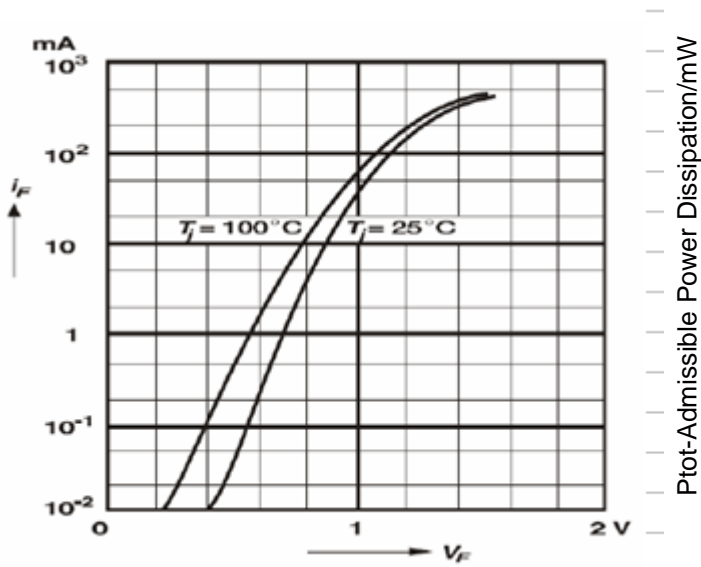


Figure 2. Power De-rating

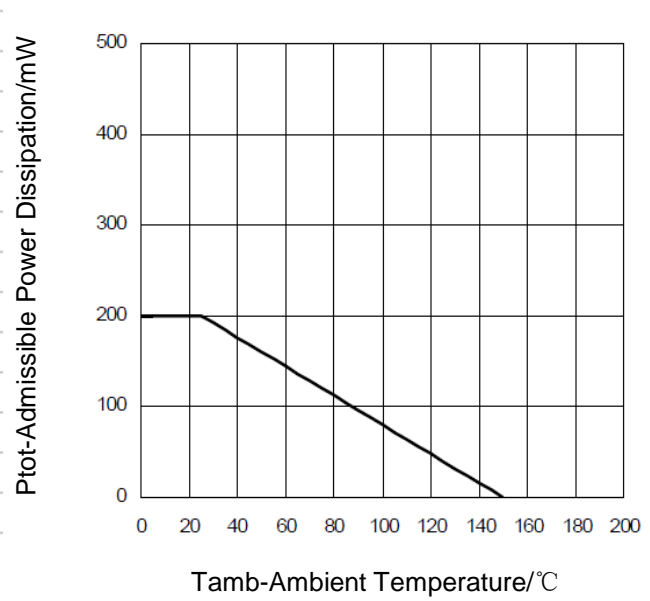


Figure 3. Forward Current De-rating

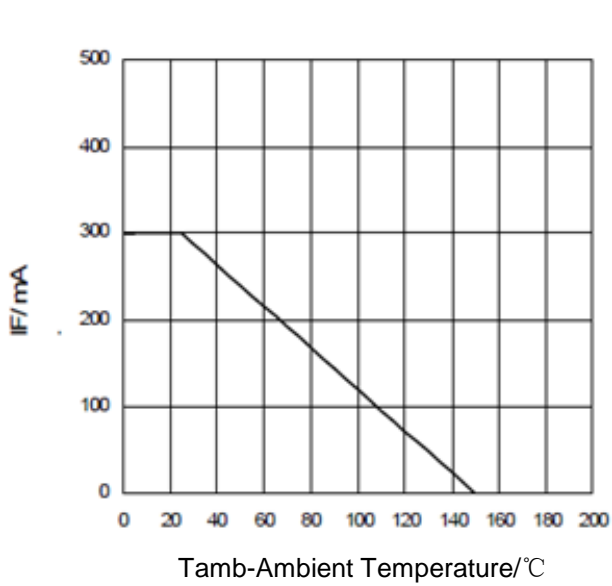
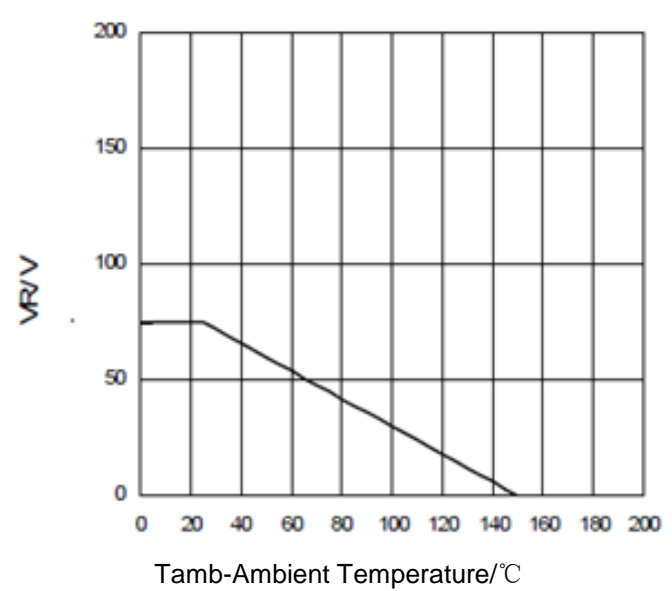


Figure 4. Reverse Voltage De-rating





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