

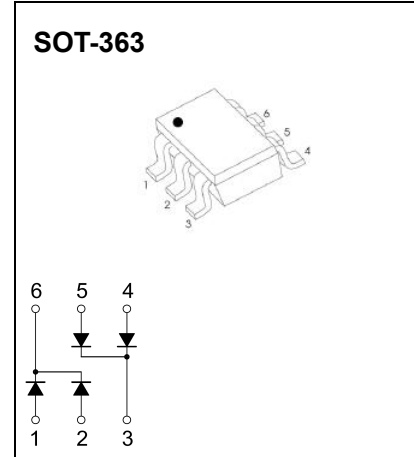
Plastic-Encapsulate Diodes

SCHOTTKY BARRIER DIODE

FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Fast Switching
- Low Leakage Current

MARKING: BRA



Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

		Limit	Unit
Peak Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Forward Continuous Current	I_{FM}	350	mA
Average Rectified Current	I_O	175	mA
Non-repetitive Peak Forward Surge Current@t=8.3ms	I_{FSM}	2	A
Power Dissipation	P_d	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	°C/W
Junction Temperature	T_j	125	°C
Storage Temperature	T_{STG}	-55~+150	°C

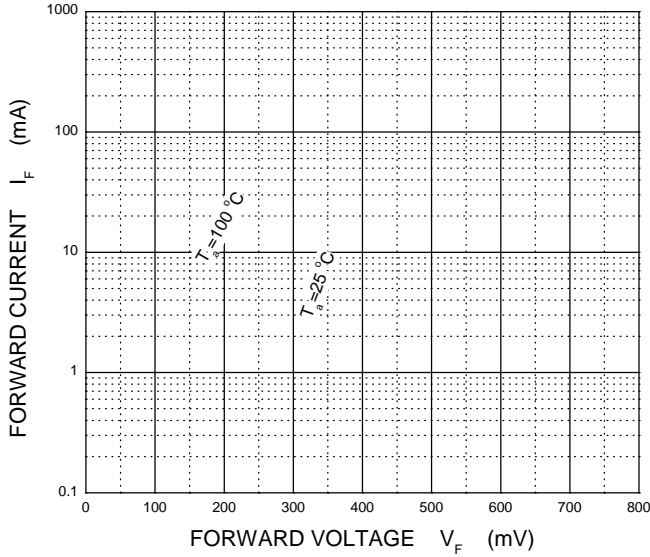
Electrical Ratings @Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$	40			V	$I_R=100\mu A$
Forward voltage	V_F			0.37 0.50	V	$I_F=20mA$ $I_F=100mA$
Reverse current	I_R			2.0 5.0	μA	$V_R=10V$ $V_R=30V$
Capacitance between terminals	C_T		50		pF	$V_R=0V, f=1.0MHz$
Reverse recovery time	t_{rr}		10		ns	$I_F=I_R=200mA$ $I_{rr}=0.1I_R, R_L=100\Omega$

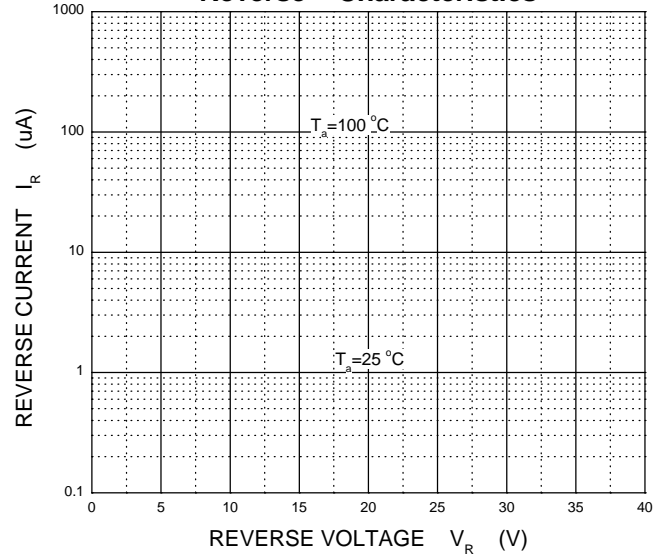


Typical Characteristics

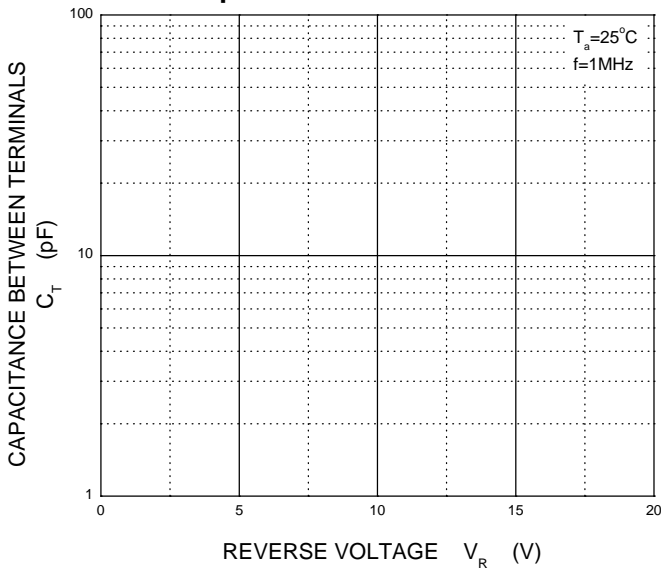
Forward Characteristics



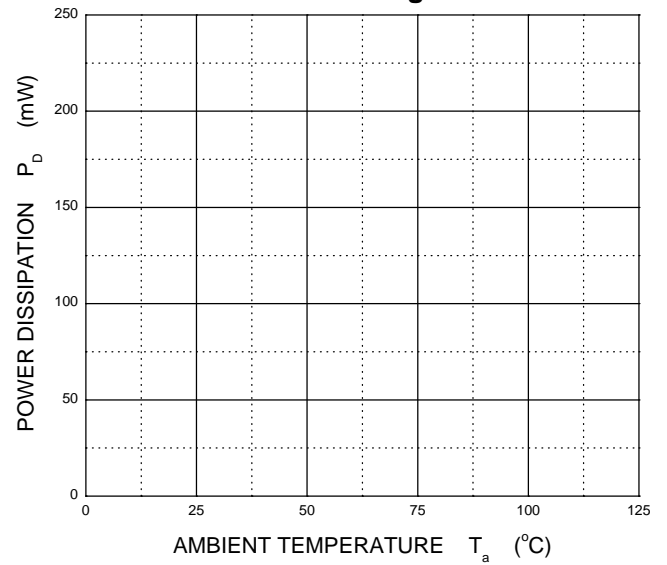
Reverse Characteristics



Capacitance Characteristics

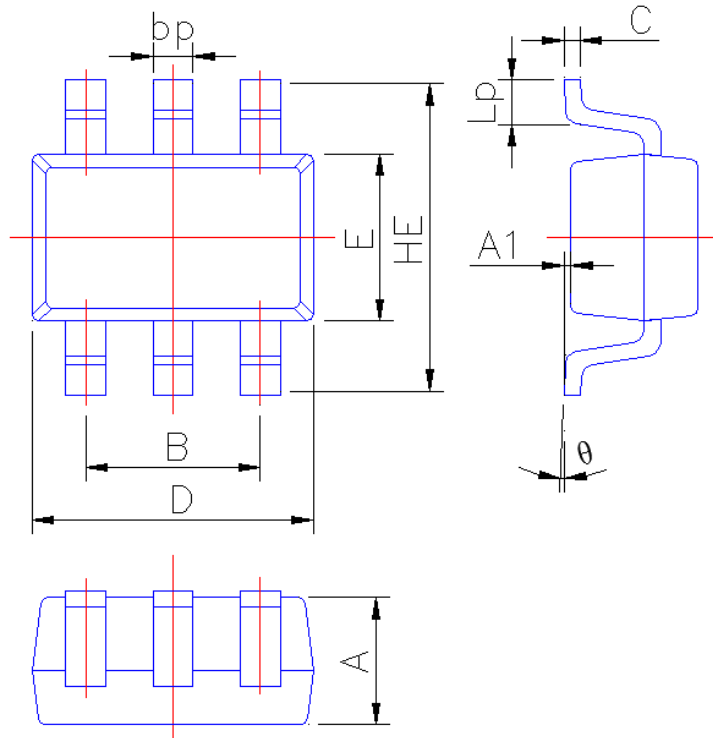


Power Derating Curve





SOT-363-Package Outline Dimensions



Symbol	Dimension in Millimeters	
	Min	Max
A	0.90	1.00
A1	0.010	0.100
B	1.20	1.40
bp	0.25	0.45
C	0.09	0.15
D	2.00	2.20
E	1.15	1.35
HE	2.15	2.55
Lp	0.25	0.46
θ	0°	6°