

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ Unless otherwise noted)

PARAMETER		MIN	TYP	MAX	UNITS	TEST CONDITION
Input	Forward Voltage (V_F)		1.2	1.4	V	$I_F = 20\text{mA}$
	Reverse Current (I_R)			10	μA	$V_R = 6\text{V}$
Output	Peak Off-state Current (I_{DRM})	800		500	nA	$V_{\text{TM}} = 800\text{V}$ (note 1)
	Peak Blocking Voltage (V_{DRM})				V	$I_{\text{DRM}} = 500\text{nA}$
	On-state Voltage (V_{TM})			3.0	V	$I_{\text{TM}} = 100\text{mA}$ (peak)
	Critical rate of rise of off-state Voltage (dv/dt)	600			V/ μs	
Coupled	Input Current to Trigger (I_{FT}) (note 2)	5300	400			$V_{\text{TM}} = 3\text{V}$ (note 2)
	MOC3080			30	mA	
	MOC3081			15	mA	
	MOC3082			10	mA	
	MOC3083			5	mA	See note 3
	Holding Current , either direction (I_H)				μA	
	Input to Output Isolation Voltage V_{ISO}				V_{RMS}	
Zero Crossing Characteristic	Inhibit Voltage (V_{IH})			20	V	$I_F = \text{Rated } I_{\text{FT}}$ MT1-MT2 Voltage above which device will not trigger
	Leakage in Inhibited State (I_S)			500	μA	$I_F = \text{Rated } I_{\text{FT}}$ $V_{\text{DRM}} = 600\text{V}$ off-state

Note 1. Guaranteed to trigger at an I_F value less than or equal to max. I_{FT} , recommended I_F lies between Rated I_{FT} and absolute max. I_F .

Note 2. Measured with input leads shorted together and output leads shorted together.

CHARACTERISTIC CURVES

Fig.1 Forward Current vs. Ambient Temperature

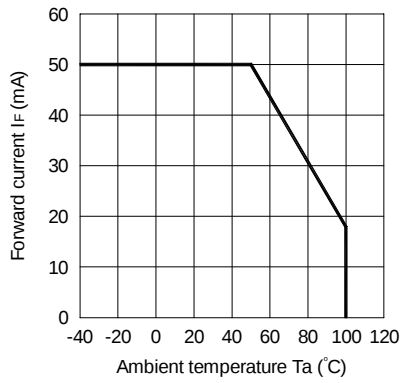


Fig.2 On-state Current vs. Ambient Temperature

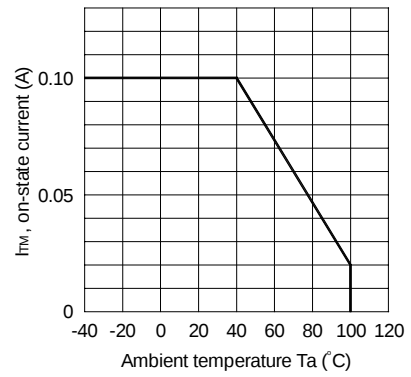


Fig.3 Minimum Trigger Current vs. Ambient Temperature

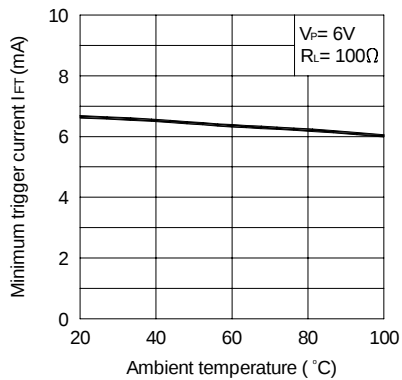


Fig.4 Forward Current vs. Forward Voltage

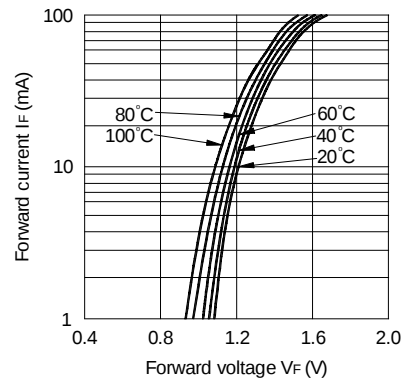


Fig.5 On-state Voltage vs. Ambient Temperature

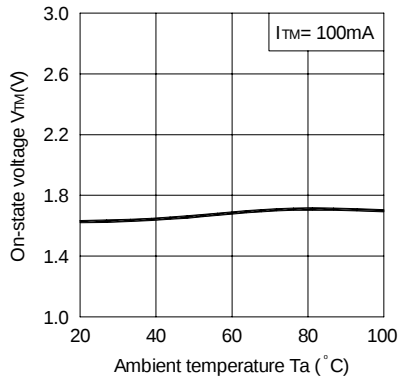
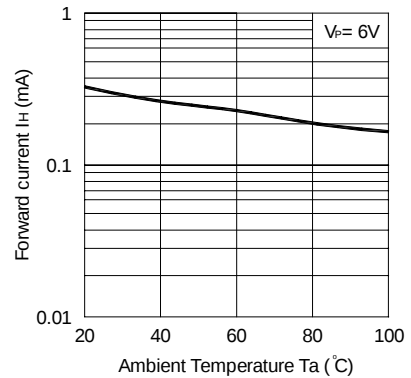


Fig.6 Holding Current vs. Ambient Temperature



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Fig.7 Turn-on Time vs. Forward Current

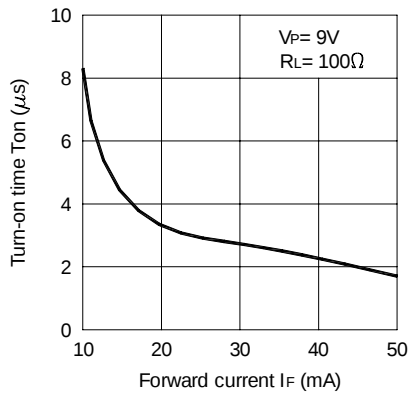


Fig.8 Repetitive Peak Off-state Current vs. Temperature

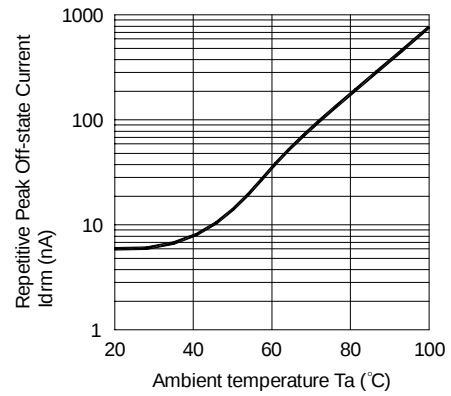
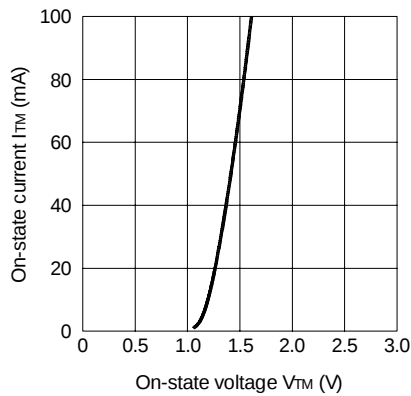


Fig.9 On-state Current vs. On-state Voltage



Static dv/dt Test Circuit

